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THE AUSTRALASIAN MEDICAL GAZETTE:

THE JOURNAL OF THE
AUSTRALASIAN BRANCHES OF THE BRITISH MEDICAL ASSOCIATION.

With which is incorporated the "New Zealand Medical Journal."

EDITED FOR THE PROPRIETORS BY SAMUEL T. KNAGGS, SYDNEY ;
AND FOR THE OTHER BRANCHES OF THE BRITISH MEDICAL ASSOCIATION BY
E. SANDFORD JACKSON, BRISBANE ; J. W. SPRINGTHORPE,
MELBOURNE ; J. B. GUNSON, ADELAIDE ; AND
L. E. BARNETT, DUNEDIN, N.Z.

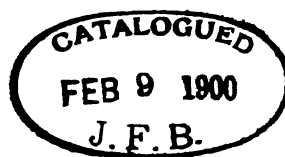
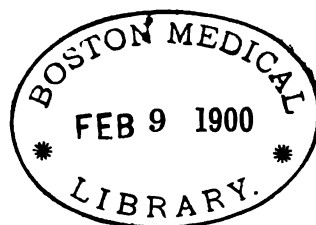
VOL. XVIII.

FROM JANUARY TO DECEMBER, 1899.

Sydney :

Published by the New South Wales Branch of the British Medical Association,
at 121 Bathurst Street, Sydney.

1899.



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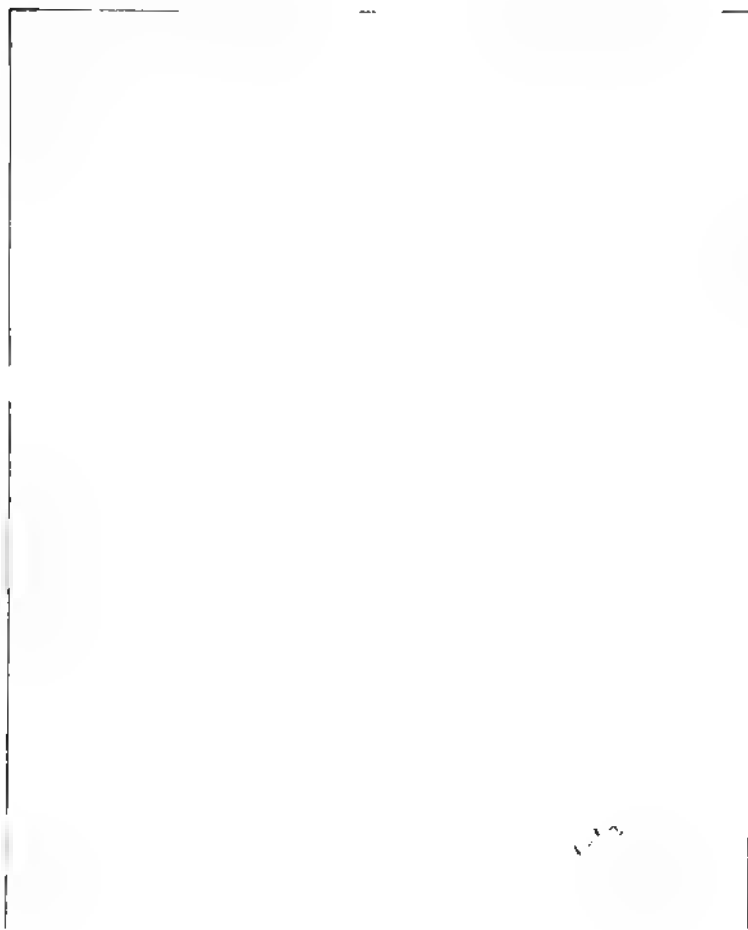
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THE LATE SIR ALFRED ROBERTS, KNIGHT.

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ORIGINAL ARTICLES.

RETIRING PRESIDENTIAL ADDRESS.

By R. L. McADAM, B.A., M.D. CH.B., D.P.H.
(Univ. Dub.), MELBOURNE.

(READ BEFORE THE VICTORIAN BRANCH B.M.A.)

MR. PRESIDENT, LADIES AND GENTLEMEN,—

My year of office has reached its close, and, in accordance with the dictates of custom, I must for a short time to-night crave your patience while I deliver my retiring address.

As I look back upon the twelve months during which it has been my happy privilege to preside over the meetings of the Branch, I can honestly congratulate members upon what has proved to be a very successful and prosperous year. Our gatherings have been numerous attended; our debates have been interesting, lively and well-sustained, and no ruffle of ill-temper, no breeze of discord has arisen to mar the harmony of our proceedings.

The *bonhomie* and good feeling exhibited in the meetings of the Branch are but a reflex of the position of affairs in the Council. Certainly no man could find anywhere a more courteous, more friendly, and more kindly set of colleagues than those to be met with there.

The Council's report is to a large extent a memorial testifying as to the industry and energy of our worthy Secretary. Few can realise, unless they have themselves passed through the mill, how much patience and dogged endeavour are necessary in order to secure papers and other material for each meeting. The number of the papers, and the quality and quantity of the other items in our year's bill of fare, are in themselves the best evidence of our Secretary's success, and of the thanks therefor which are his due. The Hon. Treasurer has also ably fulfilled his duty, and the meed of praise to which he is entitled is by no means inconsiderable. Though the Treasurer's work is not of a showy or ostentatious nature, it is nevertheless of supreme importance as regards its bearing upon the well-being of the Branch. That Dr. Thomson has worked worthily and well, his favourable financial statement is ample proof.

Death has not been busy in our ranks during the last year. Still, I regret to have to record that two from amongst our number have passed to swell the ever-increasing majority. I refer to Drs. Rosenblum and Crowther. Both young, both with the future opening brightly before them, they have been untimely called

away. Surely, *pulvis et umbrum sumus*: "The sceptre, learning, physic, must all follow this and come to dust."

It is but fitting, too, that mention should here be made of the death of one whose strong individuality, ability and earnestness have stamped themselves upon the history and growth of our world-wide Association. Early in the year we had to mourn the loss of Ernest Hart. To him is due in no small degree the success which has crowned the efforts of those who originated the British Medical Association. Distinguished in many walks of life, and always employing his powers for the promotion of noble aims and enterprises, his passing leaves us so much the poorer. Men of his stamp can ill be spared to-day.

Since the last Annual Meeting our Branch has continued to widen and extend its influence. When my predecessor delivered his valedictory address he had the pleasure of chronicling the formation of a district-branch in Launceston. This year two district branches have come into existence in Victoria. The Ballarat Medical Society has ceased to be, and in its stead we now have the Ballarat District Branch of the British Medical Association. Everything seems to promise a successful career for this new off-shoot. Similarly the Goulburn Valley Medical Association has merged its individuality in ours, and is now also a district branch. I take this opportunity of congratulating the members of both these new branches upon having thrown in their lot with us, and with the great parent Association which we represent. Through the creation of district branches we have gained a considerable addition to our roll of membership, but, apart from this cause, we have also advanced in numbers. Some of the new members were formerly with us, but resigned owing to a variety of causes; others join us for the first time. To each and all we offer a cordial welcome. In this place let me say that I feel a great satisfaction in that my year's Presidency has been signalised by the entrance for the first time of lady members into our ranks, and by their presence at our meetings. They are always amongst the most regular and interested at our gatherings, and are a distinct gain to us in many ways.

As regards local medical politics, several matters of interest call for comment. First, as to the Amending Poisons Act. With reference to the main features of the measure introduced by the Government, there appears to be a feeling of approval on the part of the profession. But

there is also a conviction that the opportunity should have been seized to devise some effectual check upon the present practically unrestricted sale of such drugs as morphia, cocaine, etc., with a view to preventing the abuse of these substances—a matter of notorious and, unfortunately, increasing frequency. Suggestions were made to the Chief Secretary with this object in view, and it is to be hoped that he will see his way to embody them in the more complete measure which he promises to bring in during the next session of Parliament. The proposal made by Mr. Moule, in the course of the debate on the Amending Poisons Act, with regard to requiring that each bottle or packet of patent medicine should state on the cover the ingredients of which it is composed, and their quantities, opens up the whole question of the sale of these nostrums. And surely it is high time that some steps were taken to protect the community against the so-called "Patent Medicines" which now flood the market, and build up huge fortunes for the proprietors at the expense of a credulous public. They have a drastic way of regulating these matters in Germany, which might well be followed with advantage here. When any nostrum is placed upon the market, the authorities have it at once analysed. The result is largely advertised, and not only so, but to the analysis is affixed the actual cost of the ingredients contained in each bottle or packet. In this way absurd pretensions are exploded, and an effectual check is imposed on the designing adventurers who trade upon and exploit the ignorance of the uninformed.

The new Meat Bill is one that promises to be a useful and efficient piece of legislation. It is a tardy effort to effect a much-needed reform—one which many members of the profession have urged for a long time past. Of still greater necessity is it that the milk supply of the community should be radically improved. Forming, as it does in many cases, the sole, and in others the chief food-stuff of the growing child, it is of vital importance that its quality should be of the best, and its purity above suspicion. Besides, milk is an article of such universal use by adults as well as children, and its power of conveying infection when polluted by pathogenic organisms is so well established, that it becomes a matter of the gravest public interest that its freedom from such danger should be ensured. To this end it is necessary that the greatest care should be exercised as regards the health of the animals furnishing the milk; the quality and purity of their food and water; the ventilation and

cleanliness of their byres and sheds; the efficient cleansing of the udders of the cows, and of the hands of the milkers; the sterilization of the vessels into which the milk is received; its rapid cooling thereafter; its quick and uncontaminated delivery to the consumer. It is obvious that unceasing and intelligent and stringent regulations of such a trade as this is necessary. Yet while here such regulation is almost entirely ignored, its importance is recognised, and it is in full force in many other communities. Vested interests, ignorance, laziness, carelessness and other such lions in the path block the way, but they have been successfully encountered elsewhere, and, surely, the same thing will take place here if our efforts be but well directed, and our earnestness sustained. Of late there have been evidences that the public is beginning to awake as to the urgent call for reform, and such facts as were placed before the Chief Secretary by a recent deputation representing the profession in Melbourne should go far to stimulate and arouse opinion. When parents are assured that out of 1,600 infants who die 1,000 are carried off by diarrhoeal diseases due to bad milk, and yet again are told that during hot weather cases of acute milk poisoning amongst children are appallingly frequent, and that one out of every eight of the little ones affected meets death in this way, surely nothing more can be needed in order to emphasise and enforce the appeal which we of the profession make for the betterment of such a disastrous state of things. Pending the passing of efficient legislation dealing with this question of the milk supply perhaps it would be possible to adopt a plan which has been found to work very satisfactorily in New York. There, a committee was formed from members of the medical societies, and was authorised to act on their behalf. And what the committee did was this. A competent dairyman was sought out, and he entered into a formal legal contract with the committee. The provisions of the contract were as follows:—I quote from the last edition (1898) of "The American Text-Book of the Diseases of Children." "The latter (the dairyman) undertakes that his herd of Holstein and Jersey cattle shall be regularly and frequently inspected by a veterinarian selected by the committee, and paid by the dairyman. All cattle that are pronounced by the surgeon, for any cause whatever, disqualified to produce pure sound milk are forthwith excluded from the herd. Interbreeding more frequently than the fourth generation is interdicted. The cattle must be kept in a large well-ventilated, well-lighted stable,

with ample space, and no overcrowding, with abundance of pure water for drinking and cleansing; with perfect drainage; with dry cemented floors; with clean, fresh bedding of hay; and with arrangements for securing them in the stall which shall give ample liberty to the movements of the head, and for lying down, but shall do away with the necessity for chains or other fastenings, separate stalls and partitions, as interfering with ventilation and cleanliness, are done away with. The cow stables must be removed from those in which horses, chickens, and other stock are kept, by so great a distance that the cattle can in no wise come in contact with the other animals. The cows must be groomed daily, and the teats washed before each milking. The milkmen must perform their own toilets before milking, being specially required to thoroughly cleanse their hands, and to remove the dirt beneath the finger nails, wearing also unsoiled clothing. The feeding is to be regulated by the season in such wise that the milk produced shall conform to the highest feasible standard of excellence. Abundance of wholesome pasture, hay, meal, fodder and ensilage is demanded, but the refuse of glucose factories, brewer's grains, swill in any form, etc., are interdicted. There are also provisions in the contract that the cattle shall not be worried, heated, or driven, or milked except after proper interval after calving. The milking must be done with scrupulously cleansed vessels, the milk filtered through fine metallic gauze, then cooled in a dust-free atmosphere in such wise as to lower the temperature as rapidly as possible, and also to permit the escape of the gases along with the animal heat, and finally transferred to bottles rendered as nearly sterile as possible by cleansing with boiling water and steam. These jars, which must be entirely full, are closed by a metallic cover, sealed, transferred to boxes with a layer of ice on top of them, and delivered at an early hour in the day, the temperature of the milk never being allowed to rise in the interval above 50° F. The dairyman further undertakes to pay for the services of a competent chemist and biologist, who shall frequently test the milk and whose analysis and certificates shall accompany it. He also undertakes to have his stables, cattle, feed, bottling arrangements, etc., open at all proper times to inspection, and to comply with all other requirements of the committee which they in their judgment shall deem essential to securing the highest attainable degree of quality and purity. The only obligation which the committee assumes is that it permits the milk to be sealed with a

label bearing the name of the dairy and the dairyman, and the legend "Certified Milk," and to be accompanied by the certificate of purity bearing the name of the committee, the chemist, the biologist, and veterinarian." If a similar arrangement could be made here, no doubt the enhanced price which such "certified milk" would command would more than compensate the vendor for the extra trouble and expense involved in its production and distribution.

The year has been marked by the considerable increase in the number of cases of typhoid fever which occurred during the season when the disease usually becomes rife.

There was also one of those periodical outbreaks of measles to which, from time to time, we are accustomed. The epidemic, which still prevails in some of the more remote portions of the colony, has been directly and indirectly the cause of many deaths, and of a large amount of loss and suffering to the community. The factors which operate in bringing about the occasional epidemicity of endemic diseases, such as measles, are at present obscure and little understood, and afford subject matter for much thought and discussion. As to the valuable assistance which an Infectious Diseases Hospital would afford in the way of isolation, etc., in limiting or stamping out epidemic outbreaks there can, however, be no question. It is therefore much to be desired, in the interests of the public health, that speedy effect should be given to the wishes of the subscribers who so generously contributed to the fund for the erection of such a hospital.

A new edition of the "British Pharmacopœia" marks a further advance towards the attainment of that precision and efficiency in the administration of drugs which we all aim at. There are some who think that the revision committee might reasonably have gone farther than they did, but there can be no doubt that the general feeling of the profession is one of approval as regards the main changes embodied in the volume. The materia medica student of the future will certainly have reason to rejoice at the systematised dosage and other simplifications introduced—alterations which will go far to make the study of that unpopular subject much less irksome and arduous than it has been in the past.

The lately published researches of Major Ronald Ross, I.M.S., on the part played by mosquitoes in the propagation of disease open a new and fascinating chapter in the romance of medicine. Thanks to Bancroft and Manson

it was, of course, known long since that the mosquito was the chief agent in the dissemination of filarial disease, but it was not until recently established that the insect was also concerned in the spreading of other parasitic affections. Ross's experiments and observations have as yet by no means reached finality, but he has certainly succeeded in proving that mosquitoes, themselves affected with proteosoma-disease, a malady resembling human malaria, to which birds are subject, can and do cause this same affection in healthy birds bitten by them. He has found that the "flagellated bodies" which give rise to the disease make their way into the veneno-salivary gland of the insect, and are injected together with the poison at the time the bite is made. Diseased blood upon which the insects have fed has been proved to be the source of the malady in themselves, they in their turn, after the lapse of a sufficient time, infecting healthy birds by biting them. Now the life-history and behaviour of the proteosoma plasmodium are very similar to those of the malarial parasite from whose ravages mankind so widely suffers. It is therefore safe to predict, as Ross already more than hints, that the mosquito plays a considerable and most important part in the dissemination of malaria in the numerous regions where it afflicts mankind. He is now still further investigating this important subject, and his results are awaited with much interest. The whole matter is suggestive of the need for closely scrutinising the mosquito in those regions, such as our own, where the insect makes its unwelcome presence felt. In parenthesis, it is to be noted that the mischief appears to be perpetrated solely by the female; the poor male creature, a harmless fellow, not being a blood-sucker.

The progress of plague has been watched with much anxiety during the year. It appears to be slowly but surely making its way along many lines of communication, and crops up unexpectedly in places separated by very wide intervals of space. Its latest appearance, that in Madagascar, is likely to prove a calamitous occurrence for that unhappy island. Sanitary arrangements may there be said to be non-existent, and amid the political confusion and unrest which prevail, European authority and European knowledge will have little chance of offering any effectual resistance to the ravages of the dread scourge. It is, of course, impossible to say whether plague will manage to obtain such a firm hold on Europe as it has done on many occasions in past times. We know, for instance, that at the period of its greatest

virulence it swept away 40,000 '00 souls, two thirds of the population then living in Europe, and left whole regions desolate in its wake. This much, however, it is safe to assert, the conditions are far less favourable for its spread now than they were when, on former occasions, its made its terrible presence felt. Since the outbreaks which occurred during the last century, one of the worst of which was that at Marseilles in 1720, when between 40,000 and 60,000 people died, sanitary science and the every day practice of hygiene have made great strides. Nevertheless, it would be most unwise to rely solely upon our improved sanitation. Every weapon of offence and defence must be put in force against such a deadly foe, and no precaution left untried which may afford a reasonable hope of keeping it at a distance. As far as we, in Victoria are concerned, it is satisfactory to know that we have as Chairman of the Board of Public Health, a man thoroughly alive as to the importance of duly safe-guarding the community against the entrance of this dreadful visitant; one, too, who is thoroughly conversant with all modern methods and teachings as regards this and kindred subjects. I only give voice to a widespread feeling when I express the hope that he may soon completely recover his health, and be enabled once more to resume the duties of his important office. In connection with the prophylaxis of plague it is well, moreover, to remember that science has by no means spoken her last word. The inoculation experiments of M. Haffkine with attenuated serum, have been so far successful that he claims as a result of his latest observations, a reduction of over 86 per cent. in the mortality. This is a very striking statement, and very gratifying, if correct. That it is correct appears to be the case since the figures upon which it is based are not disputed. In other directions serum-therapy is also scoring successes, and while Haffkine in the East is so strikingly contending against plague, Sanarelli in the West is showing how similar methods can with satisfactory results be arrayed against yellow fever. Everywhere, and on all sides, men of light and learning are thus breaking lances against the deadly foes of mankind. In the olden times the good knight sallied forth armed *cap-a-pie*, and lance and sword in hand fought with dragons and chimeras drear. In these last days the man of science, furnished with surer and more deadly weapons, wages, too, a warfare, but it is against those diseases and distempers which yearly claim more victims from our race than all the monsters of mythological antiquity

were ever said to do. At times, too, like their prototypes of a former age, these good knights themselves fall victims, as witness the recent tragic incident in Vienna. Nevertheless, the general march of progress presses onward, and every year, aye, almost every day, medical science achieves fresh triumphs through the devotion of her sons.

Amid all the manifold activities of medicine at home during the last year, none looms more largely or more strikingly than the spread of the movement for the prevention and combating of tubercular disease. This fell affection is undoubtedly the most formidable agent for the destruction of human life with which we have to deal. When we reflect that it claims yearly in Europe alone a million lives as its awful tribute, or consider further how its ravages are felt in almost every climate and on every part of the world's surface where men are found, we can well understand how eagerly some remedy is sought, and how anxiously our fellows look to us for help. In the United Kingdom some 60,000 persons die yearly from tubercular disease, while 250,000 are computed to be there suffering from it. Indeed, in all mortality statistics this malady figures so largely that it is stated that from one-sixth to one-seventh of all who die have "this knot intricate of life" untied by its means. Now, while much has been done indirectly in England by wise sanitary regulation for the extirpation of this disease, it is strange that until this year there has been put forth no special and organised effort in this direction. England has taken the lead in sanitary science and sanitary legislation. Her enlightened laws on all matters affecting the public health are regarded, and with justice, as models for imitation. She has not, however, been first in the field in the attempt to fight tuberculosis. Leagues for this purpose have been in existence in France and other places during the last few years, and gratifying success has already resulted from their operations. This success, together with the crying need which exists for some similar action in the United Kingdom, doubtless led to the initiation of the movement there. At any rate, when the appeal for the formation of such an organisation was made to the public by Malcolm Morris, Broadbent, Wilks and others it was at once readily responded to and the "National Association for the Prevention of Consumption" quickly took shape. That success will attend the work of this Society there can scarcely be a doubt, and already its influence is being widely evidenced in the increased activity apparent in the prosecution of the campaign against tuber-

culosis. Prevention is, of course, the primary object of this as of all similar societies; for prevention is now, and will always continue to be a much more satisfactory matter than cure. Nevertheless, the attempt to cure tubercular disease, and more particularly tubercular disease as it affects the lungs, is, under modern methods, attended with an enormously greater measure of success than has been the case in times past. The hygienic plan, as it is termed, the plan which depends for betterment and cure of the condition of the phthisical upon the free use of the great agencies of pure air and sunshine, is that which gives far and away the best results of any. The method is easily applied, it is comparatively inexpensive, and it is pleasant, three great desiderata in the treatment of all diseases. Even in the cold, damp, relatively sunless, and, as was formally thought, unsuitable climate of Britain, most gratifying results are being obtained by reliance upon the powers of air and sun. That consumption is a preventable disease may now be said to be an axiom in the profession. That consumption is likewise a curable affection, and one in which large numbers of cures do actually occur, is to-day denied by very few indeed. The evidence afforded by pathological records and by clinical observation is so convincing and so strong in favour both of curability and of cure that the contrary view may be said to be no longer tenable. For the comfort and encouragement of those affected by the disease this fact needs to be most strongly emphasised. But outside the ranks of the profession, and, indeed, in not a few cases within them too, very exaggerated and unsound opinions are often held with regard to the inheritance of the consumptive "taint," as it is termed. That it is possible to hand on to one's offspring a constitutional unsoundness, which, if neglected and unchecked, renders its possessor an easier and more likely victim than others to the attacks of the tubercle bacillus, there are undoubted grounds for believing. But there appears to be little, if any, reliable scientific reason for thinking that consumptive parents transmit consumption to their children, or infect them in any way differing from that in which they infect others brought in contact with the disease germ which they constantly evolve. This being the case, it is obvious that the prospect is a much more hopeful one than of yore for those born of consumptive parents, and particularly is this hopeful view warranted when it is fully recognised, as it ought to be, that phthisis is a distinctly infectious disease, that the infective material is largely present in the sputa of those affected, and that unless

some simple, but most necessary, precautions be observed, these sputa are an element of danger, not only to all around, but also to the invalid himself.

To return, however, to the open-air treatment of phthisis. The system in crude and imperfect form appears to date back to the remote antiquity of the days of Hippocrates. Its modern advocate, the man who first systematised and reduced it to practice was Dr. Herman Brehmer, who established his open-air sanatorium for the treatment of phthisis at Görbersdorf, in Silesia, in 1859. From a small spark great flame hath risen, and to-day sanatoria, of which that at Görbersdorf is more or less the pattern, are scattered over the Continent of Europe, are found at Saranac Lake, in the Adirondacks, and at other places in the United States, and have lately been established in Britain.

Without entering into details, the main principles which obtain at these institutions are the following:—

- 1st. The adoption of methods to ensure that the patient shall live in the open air by day and night in all weathers.
- 2nd. Careful attention to the feeding, even forced feeding being the rule in some sanatoria.
- 3rd. Strict precautions as to the disposition of the sputa.
- 4th. Intelligent, careful and constant supervision of rest and exercise.

The results achieved at these institutions, of which in Germany alone no less than 43 exist, are extremely satisfactory. Moreover, the sanatoria are situated in varying climates and at differing altitudes, yet the records of success are apparently little, if at all, influenced by these circumstances; equally as good results being achieved in places a few hundred feet above sea level, as in those whose height is measured by thousands; in climates characterised by considerable moistness, as in others of low humidity. The effects of the treatment are soon apparent, and show themselves in the reduction of fever; in the abolition of night-sweats; in the increase of appetite; in the gradual disappearance of bacilli from the sputa; in the healing of the lung; and in a gain in weight of from two to five or more pounds per week. So much good has already resulted from sanatorium treatment of this kind, that the sick insurance societies which exist in Germany, have in some cases subsidised the sanatoria so that they may be privileged to send in patients, and in others, have actually themselves founded such institutions and carried them on for the benefit of the insured.

Now, it may fairly be asked what is being done in this direction in Victoria? Here we have a climate second to none in the facilities which it affords for taking advantage of the full benefits of the open-air treatment. Yet I believe I am perfectly correct in stating that there is in this colony no institution or sanatorium in which any attempt is made to carry it out in its completeness or entirety on the plan followed at Nordrach, Hohenhonnef, Görbersdorf and scores of other places in Europe and America. Yet it is unfortunately the case that we have hundreds, nay thousands of consumptives in our midst to whom such treatment holds out by far the best hope of recovery of which at present medical science is aware. Let a few statistics speak for me here. Taking the deaths from phthisis in Victoria during the last eleven years we find they total 16,841. That is to say, on an average we have lost 1,531 of our fellow-colonists from this cause during each year of those eleven. To me it seems unspeakably sad that every day, some four lives are sacrificed at the bidding of this inexorable malady, and sadder still that those thus taken are snatched away just at that period of life when likely to prove most useful and most productive. For I need hardly remind you that deaths from phthisis occur by far the most numerous between the ages of 15 and 45. Now for every person who dies from this disease it may fairly be assumed that there are at least four affected by it. Hence, it is a safe inference that amongst our small population, there are some 6,000 consumptives, each of whom is conscious that, like a sword of Damocles, the doom is suspended over his head. Surely such a state of things appeals to all.

But in addition to these facts there are yet others to which I wish to direct attention. For one thing, our phthisis death-rate is higher now than it was during the periods 1861-70 and 1871-80, though slightly lower than it was during the period 1881-90. The following figures based upon returns kindly supplied to me by the Assistant Government Statist show this:—

MEAN DEATH RATE FROM PHTHISIS IN VICTORIA
PER 10,000 PERSONS LIVING.

1861-70	...	...	...	...	12.48
1871-80	...	...	...	...	12.77
1881-90	...	...	...	...	14.33
1891-95	...	...	...	...	13.28

Moreover, though there has been an improvement in our phthisis death-rate since 1890, in which year it reached 14.61, a record only exceeded by that of 1887, which was 15.34, yet this improvement has to be largely discounted in consequence of the fact that a considerable

amount of emigration took place during the intervening years, the emigrants being almost entirely persons at the susceptible ages. Further still, if we split up the total Victorian rate, and examine the figures of its constituent parts we find that while the rate for Greater Melbourne has latterly been decreasing somewhat, that for the extra metropolitan districts has been continuously on the up-grade. Taking for convenience three ten yearly periods beginning with 1868, and ending 1897, the figures are as follows:—

MEAN DEATH RATE FROM PHTHISIS PER 10,000		PERSONS LIVING.	
		Greater Melbourne.	Extra Metropolitan District.
1868-77	...	21.71	8.53
1878-87	...	22.92	9.36
1888-97	...	18.63	9.92

There is another matter of which it is well to remind ourselves. *The Victorian phthisis death-rate is very much greater than that of any of the other Australasian Colonies.* Queensland, *longo intervallo*, comes next to us, but in her case the rate is largely swollen from the fact that her Kanaka population is peculiarly prone to the disease, and that with these islanders it proves very rapidly fatal.

The following comparative figures, for which I am indebted to Coghlan's "Seven Colonies of Australasia," startlingly prove the truth of the above assertion:—

DEATH RATE FROM PHTHISIS IN 1896 PER 10,000		PERSONS LIVING.	
Victoria	12.11
Queensland	9.52
South Australia	8.70
New South Wales	7.97
New Zealand	7.40
Western Australia	6.94
Tasmania	6.91

Surely enough has been stated to warrant the contention that, with regard to this matter of phthisis, we need very carefully to consider our position. If an epidemic of scarlet fever, typhoid, diphtheria, measles, cholera, or small-pox were to break out amongst us, what a scare would ensue, and what energetic measures would be loudly called for! Here is consumption, a disease which is forever with us, one which claims more than twice as many victims as do all these scourges put together, one which can easily be fought against and efficiently controlled, and yet we have been content in the past, and we are even content now, to fold our hands and sit idly by while it works havoc and destruction in our midst.

But I am persuaded that this *laissez-faire* state of matters will soon be altered, and I would strongly urge that steps be at once taken

with this object in view. Let us form here in Victoria an Association for the prevention of consumption similar to those now in existence in England and on the Continent. The work is one which above all needs organised, judicious and persistent effort, but there is none which holds out promise of greater results, or is likely to be of better service to the public welfare. The objects of such an Association would include efforts to extend the benefits of the sanatorium system, particularly to the poorer of our fellow-colonists who are now practically debarred from participating in them. This is being done in France, Germany, Russia, Norway, the United States, and England. In addition, the Association, following out the lines of operation laid down by similar bodies in the countries named, would devote itself—

- 1st.—To the study of everything relating to tuberculosis.
- 2nd.—To the distribution to the public of various forms of literature descriptive of the ways in which the disease is transmitted; the methods of preventing infection, and the precautions necessary in dealing with consumptives.
- 3rd.—To the stirring up and enlightenment of the sanitary authorities with regard to their duties in this matter.

Certainly, as far as we in Melbourne at any rate are concerned, where the mortality from phthisis is almost always, at least double that obtaining in the rest of Victoria there is pressing need for action. Especially is this the case when we have evidence from other cities far less favourably circumstanced than we of the beneficial effects which follow the adoption of wise and proper measures. Very notably is this seen, for instance, in the City of New York, where, under the efficient supervision of the Board of Public Health, the mortality from all forms of tubercular disease has during the last twelve years, been diminished 35 per cent. Moreover, the decline is most marked in the more recent years, the rate for 1897 being a record for lowness; while for the first six months of the present year, the figures are even more favourable than for the corresponding period of 1897. Surely, if plain facts and clear evidence are worth anything, the foregoing should be sufficient to arouse us to a sense of our duty in this urgent matter of safe-guarding the community against tubercular disease.

To one other topic I must allude before bringing my remarks to a close. The question

as to whether the relations at present existing between the Medical Profession and the Friendly Societies are satisfactory, has lately been propounded by the Medical Defence Association. By the representative Conference of Delegates convened to consider the matter there was given for answer an unmistakable and unanimous "No." The remedies suggested by the Conference are practical and calculated, if adopted, to do away with many of the abuses which are now complained of. Whether they will be adopted or not depends, it is safe to say, entirely upon ourselves. If we present a united front, and there is much more likelihood of unanimity to-day than ever there has been before, we shall surely succeed in obtaining the reasonable and fair treatment which is all for which we ask. The Battle of the Clubs has already been fought in many places in the old country, and hitherto, an unbroken series of victories has been scored for the profession. Here, the same results will certainly be secured if but a similar spirit and determination be evinced.

Thus, in the limited time at my disposal, I have endeavoured to give, in some sort, a brief abstract and epitome of a few of the more salient and important matters in the domain of medicine during the year now fast drawing to its close. Nothing startling has occurred, no epoch-making discovery has been made, but the record for 1898 is nevertheless one of advance and progression. As the years roll on, the Profession of Medicine occupies a more and more important position in the world's eye; it looms more largely and impressively as a determining factor in human affairs. With rare disinterestedness and self-sacrifice the physician tends increasingly to merge himself in the sanitarian, whose aim is not so much to cure as to prevent and extirpate disease. That pain and suffering and misery and death will ever wholly pass away from man's experience we none of us are sanguine enough to think. Nevertheless, we seek after the ideal, we stretch out eager hands, and we look with longing eyes unto that new earth which, under the fashioning hand of the Great Master-Spirit of the Universe, promises yet to be evolved in the coming ages, and we stand like the shade, on the bank of the Stygian river, "*Tendentemque manus ripæ ulterioris amore.*"

WANTED TO PURCHASE.—GOOD SECOND-HAND MICROSCOPE, binocular preferred, with Condenser and appliances for bacteriological work. State maker's name and all particulars, with price, to E.J.A., care of L. Bruck, 15 Castlereagh-street, Sydney.

MY EXPERIENCE OF HYPNOTIC SUGGESTION AS A THERAPEUTIC AGENT.

BY HON. J. M. CREED, M.L.C., M.R.C.S. ENG., L.R.C.P. EDIN., SYDNEY.

(READ BEFORE THE N.S.W. BRANCH B.M.A.)

No. I.

IN reading this paper, my wish is to place in a logical manner before the New South Wales Branch of the British Medical Association a portion of the evidence which has convinced me that in "hypnotic suggestion" humanity possesses a potent therapeutic agent which can be employed with very great advantage as an adjunct to the remedies in ordinary use by all practitioners of medicine. I desire it to be plainly understood that I do not in any way assert that it is a universal remedy before which all disease must yield. It is not possible, for instance, to bring about any immediate organic change, but it is, I think, quite possible to set up such an improved condition of the nervous function as to render all the circumstances likely to produce such change more favourable. For instance, in the case of a fracture occurring in a good hypnotic subject, though it is beyond the range of possibility to directly repair the injury by hypnosis, much may be done to hasten complete recovery by its means. All sense of pain may be prevented, the spasm and irritability of the muscles attached to the bones fractured can be avoided, rest and sleep, without the use of narcotics (which from their effect on the functions are always more or less detrimental), can be procured at will, relish for food can be created, and other emergencies insurmountable by ordinary means may be met as they arise. Under such circumstances, I submit a fracture would do much better even in its earlier stages than in a case in which hypnotic suggestion is not available, whilst in the later stages, when it is desirable to set up passive motion in the adjacent joints, its value can hardly be overestimated. A few days of such movements carried on without discomfort to the subject would prove more effective than a much longer period handicapped by the involuntary resistance set up by the dread of pain, both immediate and prospective, which is present in all patients who have to submit to the process. The halting movements which are so persistent in many people after recovery from injury, may be quickly removed by the confidence and ease which can be created by hypnotic suggestion.

In functional diseases, however, the circumstances are very different. In such cases a

recovery often ensues (in fact it may be depended upon) in so short a time as to appear perfectly miraculous when compared with the progress towards recovery made by similar sufferers treated by drugs. In my opinion, even in those instances in which recovery takes place under the exhibition of the remedies of the pharmacopœia, success has frequently been the result of suggestion, unconscious on the part of both doctor and patient. In support of this view, I would ask you to call to your minds the success which often attends one practitioner in the use of drugs practically identical with those previously used by another one in similar or even in the same case. But one inference can fairly be drawn from this, viz., that the former is able readily to enforce a feeling of confidence in the patient, and so more forcibly suggests that obedience to the instructions given will result in rapid recovery.

The generally received idea has been that the weaker minds are the best hypnotic subjects, and that the most susceptible to this influence are hysterical women. In my experience this has not been the case. I find that when the patient desires to be hypnotised, and permits his mind to remain in a passive condition, that the more intellectual the person the better hypnotic subject he generally is, the more rapidly is the required power attained, and the greater and more lasting the influence is. Dull, heavy beings of little intelligence are often very difficult to hypnotise, whilst I have almost invariably found it impossible to succeed in the cases of hysterical women.

The general objection which is made against the use of hypnotism is the fear that this potent influence might be improperly used, and that subjects might be compelled to commit acts which they would not do if in their normal state, also that the operator, having once obtained control over them, is able to use it subsequently as he may will, in spite of objection and without their consent. This I may say is not in accord with my experience, for I have found that subjects who are so thoroughly under control as to be rendered unconscious and anæsthetic by the wave of my hand and the command to sleep, can successfully defy hypnotisation, if unwilling at any particular time to submit. I also am convinced that it is impossible to compel a hypnotised person to commit any act which he conscientiously believes to be wrong, or which in his ordinary condition is repugnant to him.

I may, perhaps, best at this stage call your attention to a condition which I have been able to produce in a considerable number of subjects,

and which I have not found described by other operators.

It is so very remarkable that I have asked two gentlemen who are now present, both highly intelligent men, possessing more than average business knowledge and common sense, to permit me to show you by demonstration exactly what it is. They are both good hypnotic subjects, one of whom suffered from neuralgia, from which hypnotism quickly relieved him after somewhat prolonged suffering, the other having been persistently the victim of insomnia; he, prior to his being hypnotised, often remaining awake almost the whole night for days together.

Since the first time I hypnotised the latter he has never for a single hour suffered in this way. Both of them are able to do as follows:—On making use, either in my presence or when I am absent, of the arranged signal, which in the one is placing the forefinger of the left hand on the lips, in the other inserting the tip of either thumb between them, they instantly set up this extraordinary condition.

To the bystanding observer there is no apparent change, they converse, go on with their occupation, and do everything just as if nothing had taken place, but in spite of all this they have, on using the signal, ceased to be sensible to pain. Nothing hurts them, and they can submit to being pricked, pinched, or otherwise maltreated without the slightest feeling. This you can test yourselves, for my patients, though as you perceive quite conscious of everything going on, will have no discomfort as the result of your efforts to hurt them. Nor are they only insensible to pain arising from injury inflicted whilst they are in this condition, but if at any time they have any, whether arising from accident or consequent on the morbid condition of any part (for instance, in toothache or neuralgia), by making use of the signal it ceases instantly.*

As a case in point, Mr. H. could, and if you wish it, will tell you how, when a considerable quantity of molten and flaming "Chatterton's compound," the melting point of which is very much higher than that of sealing wax, fell upon his hand, the torture from which would, under ordinary conditions, have been both lasting and intense, and which had actually commenced, he by making use of the arranged signal never for one moment felt the slightest discomfort from it. I did not see him until a week after the

[*The subjects when requested produced the condition described, which was thoroughly tested by the members present, who found that, though completely conscious and in possession of the fullest mental faculties, they were quite insensible to pain—*Ed. A.M.G.*]

accident, when he showed me a deep wound from which the eschar had separated. A more crucial test than this it would be difficult to conceive, and yet he assures me that from the moment he touched his lips with his left forefinger he suffered no further pain. Sometime after this he came to consult me, having accidentally torn his hand to an extent which necessitated the insertion of several stitches after antiseptic cleansing. He made use of his signal, and I did all that was necessary without his having a disagreeable sensation. He held his hand in any position I required, and assisted me in what I was doing, chatting all the time being as interested and as little inconvenienced as if the little operation was being done on someone else. How long this condition would continue if left unchanged it is difficult to say, for I give my subjects the power to restore sensibility by another signal. I do this because, without the safeguard of pain, they might seriously injure themselves, and yet be unconscious of the occurrence. I would however point out that, though the power to feel pain from a fresh cause is restored, that which has been removed in this way does not return.

In a case of pleurisy, I, by suggestion, so completely removed the pain accompanying respiration that only the most careful examination, the recognition of all the physical signs, and the existence of an abnormally high temperature, convinced me that it really was pleurisy of an acute type from which the patient was suffering. He had no return of the pain during his illness, which ran the usual course.

A patient suffering much pain from dysuria depending on local inflammation was freed from all discomfort by suggestion, passing urine less frequently, and without difficulty.

When treating cases of cardiac disease, even in some cases when the symptoms were such as to justify the diagnosis of organic change, I have found that when the remedies administered and the instructions as to conduct given had but little satisfactory result, the same drugs and similar directions used in conjunction with hypnotic suggestion produced marked improvement in the patient's condition.

Possibly this may be partially accounted for as being the result of lessened nervous apprehension, the cessation of which was repeatedly suggested.

There are many other ways in which hypnotic suggestion may be made use of in the treatment of disease and for other purposes, that afford opportunities for good not within the range of drugs.

I have had hypnotic subjects complain that they had no appetite, and sometimes even loathed the sight of food. By suggestion I have not only made them feel hungry and anxious to eat, but have been able to so influence them that they would at my suggestion ask for the particular aliment which I thought it best they should take, quite unaware that they were doing so at my instance. I have had them on varied suggestion be hungry and satiated alternately four times in half an hour without having taken any food, and finally eating heartily on the last one, digestion taking place as completely as if their hunger had occurred in the ordinary course of nature. A suggestion to the effect will enable a good subject to sleep with confidence after having taken a strong purgative, confident that the sensation preliminary to action of the bowels will wake him in ample time. I have by hypnotism induced in the street, temporarily stopped threatened diarrhoea until the subject reached home and had the necessary convenience at hand.

In the modification of evil habits hypnotic suggestion opens up a vista of possibility for good which no other means of cure in any way shows. In the treatment of the morphia or cocaine habit it is possible to soothe the nervous system that the torture of abstinence, either partial or complete, is so modified as to be comparatively easily bearable, though it is true I do not think it would be prudent in a confirmed case to trust to hypnotism alone without the aid of control by an attendant. Smoking, even when the patient has completely lost power to restrain his craving for tobacco, may be completely or partially stopped as may be thought advisable. I have had patients to whom I have suggested, when they were hypnotised, that they would not only have no desire to smoke, but positively dislike it, express their astonishment that it had ceased to be pleasurable, and wondering as to the cause of the change. Others have enjoyed a smoke at the particular times I suggested they would like it, but have found that a pipe or cigarette gives them no gratification at any other.

No. II.

As an anæsthetic hypnosis is often of the highest value, though in general surgery it can never be a substitute for those in common use. A good subject is at any time when hypnotised as thoroughly insensible to pain as when under the most complete influence of chloroform or ether; but unless the patient was amenable to hypnotism before the occasion arose for its use,

it would generally be impossible to immediately produce it in a sufficiently intense form whilst his thoughts were occupied, either with the injury under which he was then suffering, or with the operation he expected to undergo. The passive mind necessary to admit of the first hypnotic control would not under such circumstances be attainable; therefore complete anaesthesia is unlikely in subjects who have not previously been brought under its influence. When hypnotic anaesthesia is available, I think in every way it is preferable to those in ordinary use, as recovery from insensibility is immediate and complete. With chloroform and the like agents freedom from pain is obtained by the saturation of the blood with the vapour used, and the action on the brain by the narcotic thus conveyed to it. The recovery is very gradual, often many hours elapsing before the nervous system regains its normal condition, whilst the ill effects on the digestive and respiratory systems frequently last for days.

Pain frequently returns in the wound, which, every time it is dressed, is the cause of apprehension and discomfort more or less intense to the patient. With hypnotism there is never any sickness or nausea, nor is there the respiratory irritation which, at all events with ether, is so frequently a consequence. Whilst in most subjects under suggestion, though the recovery of consciousness is complete, no pain is felt in the wound for at all events many hours; and in those cases in which, after such an interval, there is such a return, it can be immediately removed by a new suggestion. In addition, on every occasion when it is necessary to so interfere with the wound, either for dressing or for any other purpose, as to cause pain, hypnotic suggestion can be made use of to avoid it without any possibility of ill effect. Great advantage in the treatment of a grave case may be obtained by keeping the patient in a condition of painless rest, with a tranquil, unapprehensive mind, either by producing continuous sleep, or by merely suggesting placitude and contentment whilst the patient remains awake.

When comparing the comparative merits as an anaesthetic of hypnotism and of those in ordinary use, the power of the subject to assume and retain any position desired by the operator should not be lost sight of. Under hypnosis the patient is a lay figure, as capable of being posed and of retaining the position or attitude in which he has been placed as one used by an artist. Under chloroform the patient, when sufficiently under its influence to permit of

operation, becomes an inert mass, often difficult to handle, and even more difficult to keep in any desired position. The advantages of hypnosis as an anaesthetic in an operation were trenchantly pointed out by Dr. Brady in a paper read before this Branch in December, 1893.

In the case of this patient, whom I hypnotised for the purpose, Dr. Brady removed a very large quantity of polypi which had completely blocked the nasal passages for upwards of twenty years, during which period English surgeons had declined to operate, on the ground that they considered him too weak to be a fit subject for operation. By a series of operations, some fourteen in number, extending over as many weeks, Dr. Brady completely cleared the nose, having, in addition to the polypi, removed a ledge of bone from the septum by use of a Bosworth's saw and a mallet and chisel.

The operator remarks: "To sum up the advantages of hypnosis in this case, the patient while on the operating chair was completely passive, his head remaining in whatever position it was placed. He offered no resistance to any manipulations that were required, nor did he suffer the slightest pain. A general anaesthetic would probably have been dangerous, whilst, in addition, the operation could not not have been carried out in a similar cautious manner under ordinary general anaesthesia, as with a patient in that condition a good view of the interior of the nose is difficult to obtain, so that the proceedings are necessarily of a much rougher nature; and physiological structures in the nose are liable to be violently torn away in the attempt to remove the pathological ones. From the dense manner in which the growths were packed in the nose, cocaine could not have been conveyed to the sites of their attachment, so as to have been in the slightest degree effective in lessening the pain of the operations."

I would here call attention to the remarkable fact that I only personally hypnotised the patient at the first visit. At all subsequent ones anaesthesia was produced by the operator himself (I being absent), to whom, by suggestion, I had transferred the hypnotic control of the subject. This was always equally effective as when I produced the required insensibility myself.

Another case in which hypnosis proved highly useful was one of a lady who suffered very seriously from uterine displacement. I arranged a consultation with Dr. Foreman, and found her at the time appointed in his waiting-room. I hypnotised her as she sat, and then giving her my arm conducted her to the consulting room, to which, though quite

unconscious, she walked without difficulty. On arriving, she, by direction, got on to the operating table and took up the required position. The womb being found to be strongly flexed, a sound was passed and it was restored to a normal position, a Hodge pessary being subsequently placed for its support. She had not the slightest consciousness of pain or of her surroundings. When all was completed, she at command got down from the table and returned to the waiting room, resuming her original seat. On waking and being told nothing further would be done, she expressed her satisfaction, saying she had "so dreaded it," and went away without any knowledge of the manipulation which had taken place. In fact, on the following day she refused to believe that anything had been done, not being convinced to the contrary until the pessary was removed and shown to her a week afterwards.

In a case of dysmenorrhœa, in which the pain was unusually intense, it disappeared at once on hypnosis and the accompanying suggestion, not returning during that menstrual period. In dental operations it has proved extremely effective.

One lady of a highly nervous temperament, who would not submit to ordinary anæsthesia, or consent to any treatment of her teeth without it, had, as a consequence, the whole of them in such a condition as to leave but two of the thirty-two in a sufficiently good condition to permit of their retention and filling. She requested me to hypnotise her, which I did, and the remaining stumps and fragments were removed at intervals of a few days by Mr. Reading, dentist, of Elizabeth-street, without the slightest consciousness of pain. She would wake when so directed after a tooth or more had been extracted, wash out her mouth, have a chat, and again becoming anæsthetic at command, when more would be taken out. As a consequence of suggestion to that effect, she never felt any after soreness in the gums from which teeth had been removed, but could eat without discomfort immediately she reached home after each sitting.

Another case of much interest was one in which six stumps, very firmly fixed, were extracted in the presence of several doctors and dentists, by Mr. Ernest Blackwell, dentist, of Summer Hill, when the patient had been hypnotised by me. The teeth were of such a character that very considerable fracture of the alveoli and laceration of the mucous lining of the mouth unavoidably occurred, a large blood clot forming in it. Swabbing was suggested to remove this, but I directed the subject to wake and wash out his mouth. This he at once did without dis-

comfort, returning to unconsciousness by verbal command. On awaking, when all was over, he felt neither pain nor even soreness, but smoked and chatted with those present with spirit and zest. The same patient (two stumps having been intentionally left for future extraction on the recovery of his mouth from the injury consequent on the first sitting) went by my direction without me to Mr. Blackwell, who drew them without causing the slightest pain, after the subject had produced unconscious anæsthesia himself by using the signal (the touching of his chin with his right hand), by which I have empowered him to produce hypnotic sleep at will. He can thus at any time procure sleep, from which he obtains unusually effective recuperative rest, under any circumstances. By my suggestion he sleeps for as long a period as he fixes in his mind before going off, or until some person calls him. I suggested the latter as a means of awakening, in view of the contingency of a fire or other cause of danger arising in the house where he might chance to be sleeping hypnotically, as previous experience had taught me it is impossible to rouse a good subject from hypnotic sleep except by the use of the arranged signal. There are numerous other subjects whom I am able to send to a dentist for treatment who can, by my suggestion, produce anæsthesia at will, and thus avoid the pain attending dental operations.

No. III.

In the treatment of inebriety hypnotic suggestion has proved of the highest practical value. Men who are in every way estimable, except in their maniacally immoderate use of intoxicating liquors, have been rescued from the lowest depths of physical and mental degradation by its means, after everything else had failed to aid them in abstaining from the alcohol, which, in spite of the fact that they were fully conscious that it was destroying them body and soul, they were powerless to resist swallowing. Few, except those who have undergone the torture, or who have had long experience in the treatment of victims of dipsomania, realise how overpowering the craving is. The nature of the feeling is also but little understood. It is not a wish for the beverage, as a gratification to the palate, but in most cases an intense desire for relief from an almost indefinable feeling of depression and gnawing at the epigastrium a little to the left of the middle line in the region of the solar plexus.

A very eminent public man in the colony who repeatedly occupied high official positions, when I asked him whether the feeling which

impelled him to drink at the risk of ruin was "mental or physical" told me, placing his hand on the pit of his stomach, "it is a gnawing, sinking here, and I must pour it down." Prevent this feeling and there is but little if any difficulty for the heavy drinker to avoid liquor. It may be absent for a considerable time but when it returns, unless by experience he has learnt otherwise, he believes there is no relief but in liquor. It is at these times that the control which will be obtainable under the Inebriate Bill, introduced by me and passed by the Legislative Council, but still before the Lower House of Parliament, will be of immense advantage by giving temporary power of restriction over dipsomaniacs who are unable for the time to control themselves.

The dangerous sensation may be produced in an alcoholic subject by any depressing influence or worry, either consequent on business or arising from a domestic source. Ill-cooked, innutritious, badly served food may originate it, while a frequent cause of an outbreak is the depression consequent on undue indulgence in sexual intercourse, the last being a much more frequent cause than is generally realized. When the craving comes on nothing but some means of relieving it without the exhibition of alcohol will prevent an outbreak, and my experience shows me that with the exception of Parke, Davis & Co.'s Fluid Extract of Damiana, which in some cases is very effective for good, no drug has much effect to this end. I have however proved that in the very largest proportion of cases, if the victim of alcoholism is really desirous of being saved and is really passive in his mental attitude towards the treatment, that this craving can be quickly subdued by hypnosis. No rule can be laid down as to the intensity of the hypnotic state required in any case. I prefer, if I can get it, to produce the most profound sleep in which state the suggestions made are best received, and are most lastingly effective, but this state is not essential, for confirmed drunkards whom I have not been able to make more than slightly drowsy, have lost all alcoholic craving, and have been able to entirely avoid liquor without any difficulty. One instance I can call to mind is especially noteworthy. This man, who is a commercial traveller residing in Sydney, had more than once been so thoroughly under the influence of liquor as to find himself at Newcastle, having got there in some way which he could not remember. After treatment by hypnotic suggestion for some weeks, during which time he never became unconscious, he regained perfect control over

himself, and I am informed has never drank since, though some years have elapsed.

Another remarkable case is that of a business man of high standing who for years was the subject of periodic outbreaks of alcoholism, some of which lasted for weeks. He was placed under my professional care by his friends. When I first saw him, he was in a private hospital, in a state of sleepless delirium complicated by excessive gastric irritation and vomiting. I adopted the treatment I always use in such cases, never giving any but small doses of narcotics with cardiac stimulants and sedatives. By the end of the second day he was sleeping well, and able to take fitting food. On the fifth he went home, and on the seventh came to my rooms. He told me he was better than he usually became in three or four weeks after a debauch of the duration and severity of the one for which I had treated him, but that he was still so "shaky" that when his confidential clerk had brought numerous business letters and cheques to him to sign he was quite unable to form a single letter of his name. I put the case to him as to whether he wished to be treated for his craving by hypnotism, and on his expressing himself as desirous of this aid, I quickly hypnotised him, putting him in a few minutes into the condition of deep sleep. I left him in this state for half an hour, during which I made the appropriate suggestions, one amongst them being that he would not be tremulous, but would be able to write without difficulty on awaking. On giving him the signal to become conscious, he rose, expressing himself as feeling much better, but, on my telling him to sign his name, protested that he could not write a word, as he had learnt by experience that morning before coming to me. I insisted on the trial, when, on making the attempt, he wrote without the slightest difficulty or exhibition of nervousness. He was astonished, and very pleased at his ability to write, and, going to his office, worked with ease until evening. He came to me daily for some time, and has never since had the slightest difficulty in refraining from drink, being more capable for business he assures me, than he ever was before.

Two other cases are especially worthy of note as being those of men who, when they came under my care, were abject wrecks from continual excessive drinking, utterly without self-control or self-respect, never being able to resist drinking anything containing a large proportion of alcohol, notwithstanding that it might be in such a form as to be most repellant to any person in a normal condition.

Each of these gentlemen regained self-control, and each in his special subject, both being of a highly intellectual character, became the highest authority in Australasia upon it. Both tell me that study became much easier to them than in their best previous days, and they are able to accomplish now with but little mental effort work which formerly would have necessitated prolonged and very much greater mental exertion.

Another case was that of a youth from the country, whose mother had brought him to Sydney with a view to his learning a profession, but was afraid to leave him on account of his habits.

Though only eighteen years of age, he had been very frequently drunk during the previous four years, made not the slightest effort to restrain his appetites or inclinations, was given to associate with bad companions, and was a bad lot in every way. On the ultimate result of all this being put plainly to him, he consented to be hypnotised, and this I succeeded in accomplishing very quickly, when I commenced to impress him with the necessary suggestions, viz., that the smell and taste of liquor, or the odour and surroundings of places where it is sold would nauseate and sicken him. That he would have no wish for drink at any time, and that he would acquire a distaste for bad associations or companions, but would prefer to spend his spare time with suitable friends and at home. I also greatly lessened, without in any way distressing him, his habit of smoking. I intentionally did not suggest its total avoidance, the result being that during the two and a half years he has now been an artied pupil his mother tells me he has never taken any liquor and has left all unsuitable associates, is fond of his home and home amusements, and is now everything that she desires.

There are many other cases of similar character which have been equally successful, one notable one being that of a gentleman sent by his friends from a distant country to be treated by me for inebriety. He arrived at my rooms saturated with drink taken on the voyage, having spent all the money with which he had been supplied on leaving home in purchasing it. I placed him in suitable quarters and promptly hypnotised him. He quickly recovered self-control, and notwithstanding the fact that he has had quite as great facilities for drinking as he ever had, is a strictly sober man, with much better intellectual power than he possessed formerly if I may judge from what I found when I first saw him and the accounts sent me by his friends who

express the utmost astonishment at his recovery as every effort had been made and means used before they, in despair, despatched him many thousand miles to be under my treatment.

A very remarkable instance of the usefulness of hypnotism in the treatment of a victim to excessive drinking is that of a professional man who had been a drunkard from boyhood. By the aid of hypnotic suggestion he was so far able to refrain from drink as to practice his profession in a distant country town under the disadvantageous conditions arising from pecuniary anxiety, residence in an hotel, and the absence of his wife. All went well for more than a year, when he was successful in obtaining a very unexpected legal victory for some clients. These people with the exuberant good nature of successful litigants literally forced liquor upon him. He found that the old craving, which prior to his hypnosis had always followed a single drink, did not come on, and he ventured from time to time to take a little alcohol, believing he could do so without danger. This was however not the case as I always warn my patients, and in a comparatively short time he became as bad as ever. He then was brought to Sydney to again be under my care. I was away when he arrived at a relation's house, and therefore did not see him for twenty-four hours, during which time he was in a terrible condition of *delirium tremens*, absolutely sleepless, having delusions of the most vivid character. He begged for drink every five minutes, and was given a little about every ten. When I saw him, he was in terror of a little red man who came from under the pillow, then grew to be bigger than himself, who violently assaulted him. I demanded his attention, passed my hand over his eyes, and ordered him to sleep. He at once became hypnotic at the suggestion, by direction he got into bed, lay quiet, and never again asked for any liquor. I gave the lady of the house, there being no man to take charge, power to waken him when necessary to take food and medicine, and then to restore him to his sleeping condition, which she was able to do. I kept him asleep with these exceptions, and those times required by the evacuations (the necessity for which I made a signal to wake), for thirty-six hours, when he was so completely recovered as to have no appearance of the effects of drink, and was able to transact work of important character without difficulty. He has now made a permanent recovery.

I have reason to believe that the cure of inebriety by means of hypnotic suggestion has been even more successful than my exact

information as to results show, as from time to time patients consult me because it has come to their knowledge that certain persons have been cured of drunkenness by my treatment. In many of these instances the individuals referred to have ceased to call on me before I considered them safe from their failing, leaving me without particulars as to the final result.

No. IV.

For insomnia hypnotism is without exception the remedy. In most cases in which the patient had suffered from prolonged inability to sleep, recourse to hypnotic suggestion has effected all that was desired. Not only is the subject's ordinary habit in this particular so altered that he generally gets a good night's sleep in every twenty-four hours, by prior suggestion made that this will occur, but in cases where circumstances prevent rest at the usual time good hypnotic subjects are able, by the use of a signal which I give them, to procure sleep at any time, or in any place which may be convenient, for as long as they may desire or circumstances permit.

The rest consequent on sleep produced in this way my patients tell me is not only as efficacious as that arising from ordinary repose, but even more complete, for the feeling of recuperation and restored power of mental and physical work follows a much shorter period of unconsciousness. They wake bright and active, ready for work, without any drowsiness remaining.

In the treatment of a case of insomnia by suggestion the only question is whether the sufferer will prove a good hypnotic subject, if he does a successful result is assured, for within a short period he will acquire the habit of sleeping almost without fail at the suggested times in the ordinary course of events, but also will have the power to produce sleep by the use of an allotted signal when he feels he requires or desires it. All recourse to narcotics is rendered unnecessary, and no habit can be acquired which is not curable without difficulty by the further use of suggestion to that end during the hypnotic state.

No. V.

In the treatment of asthma of every kind, even when accompanied by grave bronchitic complications involving excessive secretion of purulent sputa, hypnotic suggestion is of the highest value.

In many cases complete cure is effected; in others such immediate and absolute relief of dyspnoea and the other distressing symptoms of this painful disease as to appear almost mira-

culous to the sufferers and those about them. Were it only temporarily potent in the ease which it affords, it would be a palliative of the highest value; for in all cases where the patient proves to be a good hypnotic subject, tranquil easy respiration can be brought about in a few minutes even after hours of suffering, to relieve which all the usual remedies had been perseveringly administered with but little, if any, effect.

In the case of a gentleman who from infancy had suffered almost constantly from dyspnoea, of such intensity as to cause him to be almost always markedly cyanotic, I was able, having at the first attempt hypnotised him, to give such relief that before he left my room he was breathing easily, and, in accordance with my suggestion, was able to sleep with comfort the following night recumbent in bed, using but a single pillow. Previous to this he had always had, even when in his best state, to sleep with his shoulders and head sustained by several pillows, and, except when unusually well, to pass his nights sitting erect in an easy chair.

After a few weeks' continued hypnotic suggestion, all difficulty of breathing left him, and he proceeded to England, via Canada, from whence he wrote to me, saying that he had had no more dyspnoea, and was able to play tennis, cricket, and other games of a like character without distress.

A notable instance is that of a gentleman of high scientific attainments, who had suffered from early youth in the same way. So distressing were his symptoms that friends with whom he had resided informed me that, when staying with them, they often feared that he would die. No treatment ever gave him relief. The slightest exertion was often quite impossible, whilst in his best state he had to exercise the utmost caution in all he did, to avoid an attack of spasmodic breathing, which would completely prostrate him immediately. He proved a good hypnotic subject, and quickly lost all bad symptoms by the aid of suggestion. During three years, except on one occasion when attacked by influenza, he entirely lost his asthma, and even during this attack hypnotic suggestion was of the utmost value in relieving his distress. He is now in England, having, previously to going there so completely recovered as to be able to undertake a trip to the New Hebrides in the interests of ethnology, during which he made a collection of the highest scientific value. Notwithstanding that he underwent much hardship and exposure, and was attacked by malarial fever, he had no return of the asthma from which he had

suffered for so long prior to my treating him by hypnosis.

Another patient, who had suffered in the highest degree from asthma, accompanied by much bronchitis, with profuse semi-purulent sputa, was marvellously relieved by hypnotic treatment. His first attack came on after severe pneumonia at Edinburgh. In the hope of better health he came to these colonies, first residing in New Zealand and afterwards in Sydney. For three years before consulting me he had been completely unable to follow his calling as a clerk, and during the last two years of this period he had attacks of pneumonia and pleurisy which necessitated two periods of treatment in a hospital of several weeks' duration each. When I first saw him he was suffering intensely from dyspnoea, was hardly able to walk, and exhibited very marked cyanosis. He was in despair of ever obtaining relief, and determined to try hypnotism as a last chance. I was successful in completely hypnotising him in a few minutes, and the suggestions I made as to the changes I wished to take place in his condition were all potent; his distress vanished, and he was able to cough up a large quantity of phlegm without distress or the spasm which had always previously been greatly aggravated by coughing. I may here remark that the hypnotic control of this patient was easily transferable to any person to whom I found it advantageous to convey it, and that it was so potent that either myself or the individuals to whom I transferred it could by suggestion at once stop all coughing. This I frequently did when I found the bronchial tubes fairly free from mucous, and that the cough did not bring up much sputa. I would point out that in cases of bronchitis in which it would be deleterious to give narcotic or sedative remedies as tending to increase the accumulation of purulent mucous in the lungs, hypnotic suggestion can be made use of without such objection. With it the cough can be suspended for as long as it is not needed to clear them, and can be kept under such control as to permit of its occurrence when useful, and be prevented when merely irritative. On one occasion I was called to see him, shortly before midnight, as his wife and her friends believed him to be dying. On my arrival I found him suffering intensely from dyspnoea, which was so intense as to apparently threaten immediate dissolution. Not only his lips but his entire surface was of a dusky blue hue; he was delirious, and appeared to be unable to recognise anyone. His pulse was so rapid and fluttering as to be uncountable. Sweat was

pouring from his face, his arms were extended above his head, his hands grasping a fixed point to give aid to those used in ordinary respiration by the use of the pectoral and other muscles having their insertions in the humerus and the chest wall. Notwithstanding his condition, the passage of my hand over his eyes and the command to sleep at once rendered him hypnotic. On suggestion to that effect, the breathing at once became easy, all distress ceased. By direction, while still hypnotised, he got into bed and lay down with his head on a single pillow. Within five minutes all blueness had gone, his face and lips became pink, and I was informed that he slept from that time until 9 a.m. the next day, as I had suggested, without a single bad symptom recurring. He was not cured of his asthma, for he had recurring attacks at varying intervals; but when I saw him I never failed to be able to give immediate and complete relief from all distress.

The most remarkable case is, perhaps, that of a lady whose age was about thirty-five, and who occupies a minor official position in the Government service. She had suffered from asthma for fourteen years, never being entirely free from distress, and often suffering intensely. She had been treated by a number of leading practitioners without success, and had frequently changed her residence, in the hope that in a new place she might obtain relief. She had lived in localities so varied as Northern Queensland, the Darling Downs, and the south coast of New South Wales, also visiting Sydney and the Blue Mountain health resorts.

On my seeing her I found her suffering severely from dyspnoea, though not in as great distress as she frequently had been. I succeeded in hypnotising her almost immediately, and made the necessary suggestions. On waking her after about half an hour she expressed herself as feeling much better than she had done for a long time. I saw her daily for about a week, when she left for her home in the country earlier than I wished, saying that she was then better than she had been for years. In a short time she visited me again, having had some slight return of her trouble, but not to any great extent, it only being enough to alarm her as to its possible severe recurrence. In a week, during which time I placed her in the hypnotic state for an hour each day she had lost all bad symptoms, and, to use her own words in a letter, was "perfectly well, and could sleep all night, though for years I had suffered severely from insomnia." At this time I impressed her that she would obey my suggestions when sent by post or telegraph as she did when made

personally. Some short time after her return I received a letter telling me that she had got wet through during a drive, and had got cold and bronchitis as a consequence, which had induced a bad attack of asthma that confined her to her bedroom, and requesting me to treat her by telegraph. This I did on March 24th, 1896, by sending her a telegram as follows:—"Sleep for three hours without high pillow. Wake breathing freely. Report by post." In a few days I was informed that when my message arrived she was in bed propped against a pile of pillows in an erect position. These, with the exception of one, were taken away, and on reading my telegram she lay with her head on this, and, going to sleep immediately, slept calmly for exactly the three hours directed. Her condition on waking is again best given in her own words in a letter dated May 16th, 1896: "I felt almost free from asthma, and was greatly refreshed. All the wretched anxiety had passed away, and I felt that I was cured. That was on the 24th of March last, and since then I have been perfectly well. Am able to attend to all duties, and have regained a great deal of strength. I was very weak after all the years of suffering, but am now very much improved in feeling and appearance, as I can eat and sleep well."

A short time after this she had, arising from a fresh cold, another attack, and a letter asking me to telegraph to her as before was sent. Unfortunately I was away from the colony, and her friends, getting desperate at her continued suffering, arranged for a telegram to be sent to her as if from me. This message, which she calls the second, however, had no effect, and she remarked on it: "I do not know why I felt on receiving the second wire on June 8th that it was not from you, as I was actually expecting a telegram from you; but I said at once, 'It is not from Dr. Creed,' and knew that it was not." On my return to Sydney I found the letter telling me of her condition, and without any warning complied with the request to wire to her again. Of this message, in a letter on July 29th, 1896, she says: "The third telegram, June the 11th, acted just as the first, and I did not feel any doubt as to your having sent it. The weather is very cold here just now, but I am thankful to say that I feel well and strong." The benefit she received from hypnotic suggestion has been very marked, and I am informed, though I have not seen her lately, that she has had no serious trouble from asthma since, notwithstanding that extremely distressing circumstances affecting a near relative had caused her the severest mental strain and suffering for several months.

When the subject becomes thoroughly hypnotic, it is unquestionable that hypnotic suggestion affords greater relief than any other treatment in cases of asthma. Also, that the relief can be obtained not only by the direct suggestion of the operator when present, but also by the action of the patient himself, or a friend to whom power to suggest has been transferred, and that its sedative action in such cases is not accompanied by the deleterious effects which so frequently follow the exhibition of narcotic drugs when the lungs are loaded with mucous.

The rapidity with which relief is given in a good hypnotic subject is marvellous, for it is generally instantaneous, enabling the patient to lie with his head but slightly raised and to sleep calmly for hours, this sleep affording even more rest and recuperation than that obtained in the ordinary course.

No. VI.

In a case of epilepsy, of twenty years' duration, I was requested, after every other treatment had been tried and failed, both in Europe and Australia, to make use of hypnotism. To show how thorough had been the trial of all other forms of treatment, I may mention that the patient had had trephining performed, portions of the skull being removed beneath an old scar, under the supposition that an irritative cause might be found there in the form of spiculæ of the fractured inner table. Nothing, I was informed, was discovered, nor did any improvement take place. The patient would sometimes have as many as seven fits in the twenty-four hours. When in them he would for a time lapse into unconsciousness, which, however, as a rule, did not last more than a few minutes. There would be considerable convulsion, especially of the muscles of the face and neck, though he generally remained in the position in which he happened to be when attacked, whether standing or sitting. At times, however, a fit would be so severe as to bring him to the ground, and produce somewhat grave injury. He had several peculiar antipathies which, in spite of his reason, had a masterful influence over him; but, notwithstanding he was quite aware that they were delusions, he could not prevent himself acting on them as if they were realities. Before coming to me, for several years he felt it necessary to employ a companion, without whom he never moved. Unfortunately the patient can think of nothing but his malady. It is always present in his thoughts, and pervades all waking moments and actions of his life. This has been intensified, if not

originally created, by the reading of every work he could procure relating to all phases of his disease, and he has acquired the fixed idea that he is an incurable epileptic—possibly a correct conclusion, but yet one of the gravest ill-consequence to him. He quickly became a good hypnotic subject, and I obtained such control over him that by suggestion during sleep I could render every joint rigid and immovable on his waking, only to be released as I directed, one or more at a time. Any pain from which he might be suffering disappeared, and remained absent on suggestion. On several occasions when an epileptic seizure commenced in my presence I was able to produce the hypnotic condition, when the spasms would quickly lessen, and on leaving him in the hypnotic state for 20 or 30 minutes, on being awakened he would not have the usual sequela which occurred on other occasions. He certainly improved very considerably, so much so as to be able to do without a companion, but never completely lost his fits, though for a time they became less frequent. I am of opinion that the result might have been more favourable but for his overwhelming conviction that he was incurable, as this produced a condition of auto-suggestion which overpowered any I could make with hypnotic aid. He, however, told me that he had certainly improved in a more marked degree under hypnosis than under any other course of treatment which he had previously undergone.

Though not in my personal experience, I have knowledge of another case of epilepsy in which the fits have greatly lessened both in frequency and intensity under the influence of hypnotic suggestion. When the comparative hopelessness of successful treatment by the means now adopted is taken into consideration, I submit that a more general use of hypnosis for this, to the sufferer, terrible disease, may lead to a success now rarely attainable.

No. VII.

Cases of chorea of some months' duration have yielded in a few days to the effect of hypnotic suggestion. One, a girl of fourteen years, had for five months been unable to control her movements; she could not write, or accomplish any ordinary duties. She quickly became hypnotic, and in a few days, under repeated suggestion, completely recovered, being able to write, sew, use pins, or do anything she desired without difficulty. Another woman of thirty-eight suffered from spasmodic agitation of the muscles of the right side, the immediate cause being shock from business of a

grave character concerning a very near relative. In her case hypnosis was promptly produced, and under suggestion the spasmodic movements quickly ceased, returning at intervals for a few days, but completely leaving within a week on the repetition of hypnotic suggestion.

No. VIII.

Incontinence of urine is one of the conditions of childhood with which it is found to be most difficult to satisfactorily cope by the ordinary treatment with drugs. Such means, if they prove effective at all, only do so after their long continued exhibition, and when the patient has recovered it must be acknowledged that it is frequently difficult to say precisely whether the improvement is consequent on the remedies prescribed or upon the lapse of time and some changed condition in the subject. By means of hypnotic suggestion in these cases, I have had the most satisfactory results in a few days. As a case in point, I can give that of a child, aged four years, who for more than twelve months had suffered from inability to retain her water. Both night and day she was continually wet. She had been treated in the usual way during most of this time without improvement. On her being brought to me, I succeeded by Bernheim's method, aided by example, in quickly producing the hypnotic condition. I suggested that she would hold her water until she wished to pass it voluntarily, that in the night the desire to micturate would wake her, but that she would be able to control the act until she had a chamber vessel. I also suggested that the desire to urinate would be less frequent. The result was that within a week she had recovered complete control over her bladder, never wetting herself, and this condition has been maintained ever since, now a period of some six years.

No. IX.

I have found hypnotic suggestion of the greatest service in the treatment of gastric ulcer. In cases where the erosion has been so extensive as to lead to the repeated vomiting of many ounces of bright coloured blood, and in which the pain on anything entering the stomach was so great as to almost prevent the taking of food, the result of its use has been remarkable. On hypnosis being induced, I have suggested the cessation of pain, and thus enabled the patient to take food in sufficient quantity to provide for proper nutrition. In no case have I found that the ingestion of ordinary food has had any local ill effect, while

I am convinced that the cessation of the condition of more than semi-starvation, which had existed so long, restores reparative power, which quickly leads to the healing of the ulcers. My experience of these cases has led me to form the opinion that in the majority, except at the abraded spots, the stomach is fully capable of carrying on its function of digestion, that the danger of perforation is not increased by the nature of the food, but that the peril is consequent on the churning action of the stomach, and that this is probably as great when small quantities of fluids are introduced as when larger portions of more solid foods of a higher nutritious character are taken; that the disinclination of the patient to take sufficient food for complete nutrition is consequent on the dread of the pain which is produced by the introduction of food into the stomach, and that any fair quantity can be taken and digested without difficulty if this pain is prevented; that there is no way of completely avoiding it by the use of sedative drugs; and that, even were it possible to do so, the remedies which would produce anaesthesia would at the same time, and in an equal degree, weaken and retard digestion; that in very many cases by means of hypnotic suggestion absolute freedom from pain can be produced at will, without in the slightest degree interfering with digestion; and that as a consequence fitting food can be taken in sufficient quantity to supply all the needs of nutrition, the result being rapid repair of the ulcers, and complete recovery. This has been my experience in several cases, and in no case where the patient proved a good hypnotic subject was there any but the most satisfactory result, though the prospects of recovery until treatment by hypnosis was entered upon were very poor.

No. X.

By a recent paragraph which has been going the round of the Press, special attention has been directed to hypnotism as a remedy for sea-sickness. It is advanced as a great novelty, and a Dr. Paul Farez is quoted as the authority. That sea-sickness is controllable by hypnotic suggestion is unquestionable, and I have used it myself in two ways. In one case some four years ago, that of a lady who had previously always been a wretchedly bad sailor, I suggested during several hypnotic trances prior to her leaving Sydney, that when at sea she would not be sick, would not object to the motion of the ship, would not be nauseated or be made to vomit either by the movement of the waves or by the disagreeables of surrounding sea-sick

fellow passengers, that she would have a good appetite, and feel quite well. All this I was informed occurred, for not only was she not sick herself, but was able to nurse and help others who were not so fortunate, without the slightest discomfort. In another instance the passenger was able during a stormy voyage to avoid *mal-de-mer* by sending himself to sleep for an hour at a time whenever he felt nauseated. In my opinion, no good hypnotic subject need suffer from sea-sickness.

In vomiting from other causes I have found it most effective, when all other remedies persistently taken have absolutely failed to give relief, a typical case being that reported in a paper read before this Branch on October 6th, 1893, which included the notes of the case, by Dr. Sydney Jamieson, whose patient the subject was.

They were to the effect that all efforts to check the vomiting by the use of drugs, etc., having failed though tried perseveringly for more than a week, he determined to try the effect of hypnotism. After consultation between us I hypnotised her, and she expressed herself as feeling much better. She did not vomit for three days, then did so twice after drinking champagne; suggestion was again used with success. After this the recovery was uninterrupted, except that on the twelfth day vomiting set in for about three hours, the patient ejecting about two pints of dark green fluid. On being hypnotised the sickness at once ceased, and she quickly got quite well.

Another case which I treated for vomiting of a sympathetic character arising from a displaced uterus shows the efficacy of hypnotic suggestion in such cases in a very marked manner. The lady had been under the treatment of other practitioners for two years, having suffered from most obstinate attacks of vomiting during the whole of the period, with occasional intervals during which it was absent. She had had considerable attention paid to her womb, but without much relief being afforded her for the gastric disturbance. When I saw her she had become very prostrate and weak from the long-continued nausea. I quickly hypnotised her, with the result that all sickness at once ceased, and she was able to take food with enjoyment. There were recurring attacks of nausea from time to time, but each instantly ceased on suggestion, and finally left, when after some difficulty the womb was replaced and retained in its normal position.

In a case of semi-consciousness accompanying cerebral concussion consequent on a fall from his horse of an hypnotic subject I used

suggestion to control delirium and to check sickness, both of which gave considerable reason for anxiety. I kept him in a sleeping state except at the times when he took fluid food, or for the necessity of evacuation, for two days, during which neither delirium or nausea gave the slightest trouble. He made a complete recovery, the rapidity of which was in my opinion owing to the complete brain rest obtained by hypnotism.

For obstinate vomiting I believe that in suggestion we possess a remedy which will prove effective when all ordinary ones have been tried and failed.

No. XI.

In cases of megrim (sick headache) I have found hypnotic suggestion exceedingly effective, frequently proving efficacious when repeated trials of the usual remedies had failed to give relief.

Two cases, that of a mother and daughter, aged fifty-eight and thirty-five respectively, are fitting examples of this. For many years, said by them to have been at least fifteen, they had suffered almost daily from the most intense headache, accompanied nearly always by nausea and vomiting. I first hypnotised the daughter, and she ceased to have her headache so quickly that in a few days she brought her mother to be hypnotised too. A few days under hypnotic suggestion was equally rapid in its good effect, and it is now five years since either of them has suffered at all from headache, never having had one of the old type since they were hypnotised. I may say that these subjects are quiet, self-contained, matter-of-fact women, as little imaginative as any persons I ever saw.

The mother is a hard-working monthly nurse, the daughter being kept busy by the duties of the house. Both are good hypnotic subjects, the mother being perhaps the better of the two.

XII.

The foregoing is but a portion of my experience of the great value of hypnotic suggestion in the treatment of disease, and there are numerous other maladies in which it can be made use of for the relief of suffering. It is, however, not invariably successful any more than are any other of the ordinary therapeutic means now commonly in use, but when the patient proves to be a good hypnotic subject the proportion of recoveries is, I am convinced, very much greater, and without question relief or cure is much more rapid.

BRONCHIECTASIS AND FŒTID BRONCHITIS, WITH ESPECIAL REGARD TO THE TREATMENT OF THESE DISEASES.

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WITHIN the last seven years it has been my privilege to have seen and examined a large number of these unusual but distressing cases. I have therefore thought that a short article devoted chiefly to the treatment of these diseases would be of interest to your readers. My friend, Dr. Arnold Chaplin, has lately written on this subject both in the *British Medical Journal* and in "*Treatment*" (November 11, 1897), and it is to a form of treatment which he first devised and carried out that I would especially refer, since we conducted an investigation in the same treatment at Brompton Hospital and with very favourable results. I would, however, first of all point out that these diseases are often overlooked and mistaken for chronic bronchitis or pulmonary tuberculosis, and, although unusual diseases, yet are more common than is often realised. There are one or two points in connection with the clinical and pathological aspects of bronchiectasis that are worth consideration. Bronchiectasis may be defined as a dilatation of the bronchial tubes from disease of the walls themselves and of the peribronchial tissue. The primary as distinguished from the secondary dilatation is in my opinion dependent in a greater degree upon the fibroid infiltration and its subsequent contraction around the tubes than upon the inflammatory conditions of the walls themselves. The secondary dilatation seems on the other hand to be chiefly caused by the hydrostatic weight of the accumulated catarrhal secretion occurring within the tubes. As regards the presence of bronchiectasis in young children, I am inclined to think that enlarged tonsils and post-nasal adenoids play an important part in its causation, and the connection between these groups of diseases does not seem to have received hitherto the attention it deserves. We constantly find that in children suffering from naso-pharyngeal growths there is a considerable obstruction to the entrance of air into the chest, leading to insufficient

expansion of the lungs, especially in the right lower lobe, as is evidenced by the indrawing of the lower ribs. Such children, even when free from catarrhal attacks to which they are especially prone, exhibit constantly signs of mal-aëration of the blood in a greater or less degree. The question therefore naturally arises whether this factor which becomes accentuated during a catarrh will not tend to cause a greater accumulation of secretion in the bronchi before a cough is excited than would be the case in a child, the mucous membrane of whose bronchi is normally aërated and has a normal reflex excitability. Once such a condition is established, it will tend to become progressive; and, as the mucous membrane becomes more and more tolerant of the secretion, greater and greater accumulations of it will occur before the "coughing fit" is excited and the affected tubes are emptied. There is still another factor in the causation of this disease, the importance of which has, to my mind, not been sufficiently made out. We constantly find the presence of old pleuritic adhesions over the bronchiectatic portion of the lung. In the majority of cases, no doubt, such adhesions are part of the progressive chronic inflammatory process which is present in the area of lung affected; in other cases, however, the history of an antecedent attack of pleurisy (I have seen several such cases), would seem to bear out Liebert's and Biermer's statements. They maintained that the fibroid process extended inwards from the pleura as a chronic interstitial pneumonia, and that the dilatation of the bronchi was due to the contraction of this fibroid tissue. If this view is correct, then the fixation of the lung to the chest wall by firm pleuritic adhesions would tend to promote such dilatation and render it permanent.

As regards the symptomatology of bronchiectasis we should especially be on the watch for the more characteristic features, as otherwise the disease may easily be overlooked in its less advanced stages. The cough is essentially *paroxysmal*, and often spasmodic. In children, the occurrence of a suffocative paroxysm lasting many minutes and associated with the expectoration of large quantities of muco-purulent secretion, with or without retching and vomiting, should always be enquired into carefully. So *paroxysmal* does the attack become that the "coughing fit" will often occur at a definite time every twenty-four hours, and will last from five to twenty minutes, during which period perhaps six to ten or more ounces of thick sputum are

expectorated. Great relief follows and the patient is often quite or almost free from cough during the rest of the twenty-four hours. Other characteristic features are the unpleasant whiffs of gas which accompany the act of coughing and the horribly offensive sputum which is expectorated. These and other symptoms are, however, well described in most text-books on medicine.

Treatment.—Few chronic diseases are so difficult to treat as the ones under consideration. Rationally, the treatment consists of (1) removal of accumulated secretion, (2) disguising, removing or attenuating the fœtidity of the sputum, (3) securing contraction and obliteration of affected tubes. Rarely does it happen that these cases become perfectly cured, the tendency is rather to a progressive advance of all the symptoms and physical signs. Treatment can very often only be directed to the removal of the fœtor or at any rate its disguising, in the hope of making his life and the lives of those around him more bearable and less unhappy. To this end, various plans of treatment are advised, but the result is only too frequently a disappointing one.

Stimulant and the so-called disinfectant expectorants, such as tar, creosote, copaiba, tolu, eucalyptus, and many others, are often given in varying combinations with often disappointing results.

Inhalations (dry, naso-oral, or medicated steam) of menthol, ol. eucalypti, terebene, creosote, ol. pini sylvestris are of benefit chiefly by relieving the spasmodic cough, but are of very limited use in purifying the sputum.

Intra-tracheal injections of guaiacol and menthol, benzoesol and menthol dissolved in olive oil, are of much greater benefit, and when given twice or thrice daily affect in many cases a remarkable improvement in the condition of the sputum in from two to three weeks. A useful formula is—menthol, ten parts, guaiacol, two parts, olive oil, eighty-eight parts. These injections should be given by a skilled hand, with or without the previous use of a 2½ or 5 per cent. cocaine spray, and by means of an intra-tracheal syringe holding one drachm of the above solution. The point of the syringe should be introduced well within the larynx, otherwise it is very doubtful whether more than a little of the application will reach the trachea.

Hypodermic injection of sterilized fluids, such as guaiacol in olive oil (one in five), creosote in olive oil (one in four), may be given once or twice daily in doses of thirty minims by means of a syringe rendered thoroughly aseptic.

This plan of treatment seems to cause some improvement in the fetidity of the sputum, but from its painful frequency will hardly be universally adopted.

To secure the removal of the accumulated secretion, in addition to the action of expectorants, various other plans have been tried, notably, *inversion of the patient, emetics, surgical draining of the affected tubes*. At first sight nothing would seem to be easier than to drain the dilated tubes through an opening in the chest wall, yet in practice we find that many difficulties present themselves. Firstly, it is often not easy to strike the pus by means of the preliminary passage of a fine trocar and cannula; secondly, pathology tells us that more than one bronchial tube is commonly dilated, so that the difficulty of draining such cases is thereby much increased. In short, the surgeon can very often help us but little; still, when we find that in a young adult there are definite physical signs over a localized area of one lung *only*, and the rest of both lungs is in good condition, and, further, when other means have proved unavailing, it is our duty to attempt surgical procedures with the view of draining the affected bronchial tubes.

Creosote (vaporized) bath.—The plan of treatment designated by this name was first devised and carried out by Dr. Arnold Chaplin at the Hospital for Diseases of the Chest, Victoria Park, London, and afterwards by me at the Brompton Hospital. Between fifteen and twenty cases underwent this treatment, some of them for several months, and the results were certainly very promising and worthy of report. The treatment consists in exposing the patient in a room into which the fumes from boiling commercial creosote are ascending. In this manner:—Into a small room, the door, window, fireplace and all other entrances or exits of which are carefully closed, an enamelled dish, containing about six to ten or more ounces (according to the size of the room) of crude commercial creosote, standing upon an iron tripod beneath which burns a spirit lamp, is exposed. The room should be as far as possible bare and devoid of everything with the exception of one or two chairs. A concrete or cement floor and walls are the most suitable on account of the fact that the creosote very often "catches fire"; should, therefore, the floor be of wood, it would be necessary to support the tripod upon an iron tray containing water. It is best to introduce the patient as soon as the fumes commence to rise, as thereby he will be able to become slowly habituated to them and remain for a

longer time within the room and exposed to the fumes. Patients will often remain for from one-half to three-quarters of an hour within the room densely filled with the creosote fumes, and they must be encouraged to do so, since more beneficial results will occur in such cases. Individuals vary enormously in regard to the power they possess of withstanding the irritant fumes; the most favourable results occur, however, in those cases that can remain fully thirty minutes twice daily in a room densely filled with creosote fumes. The fetor disappears, the amount of sputum, after at first increasing, slowly diminishes, the general condition improves, and weight is put on rapidly. Several cases in the hospital which had previously been slowly getting worse, and in whom hospital treatment extending over several months had proved unavailing, improved rapidly in the manner I have stated, and gained from one to two stone in weight. In other cases the improvement was not so marked, but still it was obvious. The treatment is severe and unpleasant, yet the eagerness with which the patient will often look forward to it is an obvious sign of the relief he experiences by it. Before discussing its mode of action, let me first add one or two practical hints. Firstly, the fumes seem to especially irritate the divisions of the fifth cranial nerve, producing severe lachrymation and coryza; it is therefore better to protect the eyes by means of a pair of goggles, made from two watch-glasses and fixed to the skin by means of adhesive plaster. Secondly, the hair and clothes should be covered by a towel and cotton gown, as the smell of the creosote adheres for a considerable time to all forms of hair and cloth.

The mode of action seems to be a threefold one:—1. Increases bronchial secretion; 2. Increases cough, directly and reflexly; 3. Removes fetor, by destroying the bacilli of putrefaction and deodorizing the sputum. The first two are easy to understand, as in this respect boiling creosote resembles other irritant gases. The removal of fetor is no doubt due to the presence in the fumes of certain odorous bodies, probably derivatives of phenol, which act both as disinfectants and deodorants. It may be thought that less irritating fumes would be of greater benefit; a trial was, however, made with the fumes of boiling wood tar, creolin, cresoline, but none were as efficacious as those of crude creosote, and it would seem that the irritant properties of the fumes are valuable more especially by promoting cough and the expulsion of the accumulated secretions.

THE INFANTS UNDER "THE NEW SOUTH WALES CHILDREN'S PROTECTION ACT," WITH SOME REMARKS ON INFANTS' ASYLUMS.

By W. F. LITCHFIELD, M.B., GLEBE, SYDNEY.

WE were told in the last number but one of the *Australasian Medical Gazette* that nearly 10 per cent. of the children born in New South Wales were illegitimate (see note p. 32). There is ample room here for moralising, but it is my object this evening to approach the subject from another side. I wish to say something about the cause and remedy of the high death-rate that obtains among this unfortunate class. In all countries the mortality among these infants is very high (what it actually is in New South Wales has not been worked out), and continuous efforts have been made, both by legislators and charity organizations to mitigate it. A good deal has been done, but the mortality still runs high, and the public mind is still in the dark as to the best means to remedy things.

It has been urged from time to time that the establishment of foundling hospitals or infants' asylums is the only means to successfully cope with the question. I have gathered a little information on this subject, and shall put it in here for consideration.

In a recent number of the *Journal of Pediatrics*, under the editorial comments appears the following:—"Although within recent years much has been effected in the care and management of children in New York City, there yet remains room for further improvement. From an investigation of the affairs of the Infants' Asylum at Randal's Island, which until a few months ago was under the control of the city, the truth has been made public, that the mortality among the infants reaches the fearful rate of nearly ninety per cent. Before the institution was handed over to the management of the Commissioners of Charities matters were even in a worse state than now, and it was stated on the authority of the medical board that to enter it under the age of six months was certain death."

In the same journal, a little lower down, may be found:—"While on the subject of Children's Hospitals it will not be out of place to make some remarks on institutions of this kind in Italy. The lamentable condition of foundling hospitals in that country has excited much strong feeling, and steps have been taken to thoroughly ventilate the existing abuses. The report on the mortality of the Naples Found-

ling Hospital in 1895 first opened people's eyes to the gravity of the situation. In that report it is stated that out of 856 infants received into the institution in that year 853 died within the year, and that another has since died."

In another number of the same journal there appears a reference to these institutions in Paris. It runs:—"Hospitals for infants on a large scale are often most injurious to the health of their inmates. This truth has been proved time after time, more especially in Paris. One of the largest Children's Hospitals in that city was designated but a short time ago as a veritable death trap."

We have had similar experiences in Sydney, though on a lesser scale. I am informed by the director that at the Home of Hope, Stanley Street, Newtown, before the present system of wet nursing was introduced, the mortality among the infants at that place was very dreadful.

So far, it has not been made clear whether it was the management, or whether it was the basis on which they were worked that was faulty in these cases. The following quotations may help us in deciding that point. In the *British Medical Journal*, January 15th, 1898, there appears a review of a book entitled "Infant Feeding and Infant Hospitals," by Heubner. The portion of that review which concerns us here reads, "his experience in the Charité Hospital, Berlin, is fully described and forms the most valuable part of the pamphlet. In 1896 an entirely new arrangement of wards and nursing was instituted on strict antiseptic principles by Professor Koch. Before this date the infant mortality was 80 to 90 per cent; since 1896 it has fallen to 65 per cent. Every four patients have two nurses; one attends solely to the feeding, the other washes the body and attends to the excreta. Before feeding, the nurse washes her hands in antiseptics and wipes the child's mouth with an antiseptic cloth. The milk is sterilized, the bottle is kept in a sterilized chamber till wanted, the bottle being perfectly dry. After feeding, the bottle is washed out with boracic lotion and put back into the sterilizer. Each child has its own bottle marked."

I think we must decide that the management in this case under the new arrangement was scientific enough, and yet we find the mortality was 65 per cent. We seem to be driven then to the conclusion that it is the basis on which these places are worked that is wrong. The common feature in these hospitals is that bottle feeding is largely or solely resorted to.

There are some institutions, however, in which infants and children are successfully reared. We may consider them for a moment.

The institution known as the New York Foundling Hospital, and managed by the Sisters of Mercy of that city, is often cited as an example of what may be accomplished by foundling hospitals. It is certainly a successful undertaking. But we shall see that whatever it may have been at its inception, it no longer deserves to be included in the same category as the other institutions that we have been discussing. The following quotations are culled from an account of the hospital by one of the sisters. This is how they began: "At dusk on October 11th, the first little one was left at their doors The date on which the sisters had intended taking the first, they found themselves giving motherly love to eleven foundlings, whilst by January the number had reached one hundred and twenty-two." Such was the start. Nothing is said of the mortality during this time, but it may be inferred from the following that it was great: "A young woman came one day and craved not to leave her child but to be admitted with it; she was refused; again she pleaded. Then through her lips came a proposal that was indeed a divine revolution and one meaning life for thousands of babes and salvation for many an unfortunate mother. If admitted she would nurse another child with her own. She was taken in; others likewise; bottle nursing as far as possible was gradually discarded." It is easy to read between the lines here. If this new system of wet nursing meant life for thousands of babes, then the old system of bottle feeding must have meant death for thousands of babes. Further on we find, "the mothers are always urged by the sisters to enter with their babies and remain with them 12 or 14 months in the asylum nurseries." Note here the great advance made on the time when the woman who begged to be taken in was refused.

The following, found lower down in the article further shows how thoroughly the important principle of wet nursing has been carried out: "Not yet have we touched upon the great outdoor department of nursing. 1,000 babies are being nursed out by worthy women living in New York City or vicinity in easy reach. 11,000 dollars a month are paid out to these nurses, or 10 dollars per month for each child. Every possible means is taken to secure good nursing mothers for this department, and to insure good care to the little ones. . . . Usually the children are returned to the asylum when they reach the age of three years."

The record at this hospital is very good, the mortality only reaching about six per cent. Another institution showing equally good results is our own Ashfield Infant's Home. There also breast feeding for the infants is insisted on.

Again, Children's Hospitals and Asylums where the inmates are over a certain age, do not show any special death-rate. The various large Children's Hospitals furnish a proof of this. The general rule at these hospitals is to refuse admittance to any child under 18 months. As everyone knows there is nothing special in the death-rate in these places.

I may cite a further instance. At the Babies' Home, Knox-street, Newtown, there are a number of children varying from six months up to several years, none of whom are suckled; and although it is generally agreed that six months is too soon to wean a child, I am informed that the death rate there is very low.

If we care to sum up here with regard to foundling institutions, we find as a strong inference from what has gone before, that an attempt to rear by hand a number of infants under six months in the same home can only be attended with the most disastrous results, while within certain limits the grouping together of a number of suckled infants, or a number of children over a certain age is quite permissible.

I come now to the consideration of another phase of the question, namely, the treatment of these infants in individual homes. I may say, without going into references, that this method of dealing with the homeless offsprings of humanity, is now largely adopted and is growing in favour. There are, however, two distinct ways of treating infants in separate homes. The one is by having them suckled by their mothers, or foster mothers, as is done in the instance of the New York Foundling Hospital, and the other is by having them hand fed by their guardians, as is done in the case of the infants placed out under the "Children's Protection Act of New South Wales."

It may be assumed without further argument that in the former case, given honesty on the part of the nurses, and freedom from constitutional taint on the part of the nurslings, that the latter will do well. In the other case, however, the matter is not so simple, and the consideration of it brings me to an important series of statistics, obtained from the State Children's Relief Department.

Under the "Children's Protection Act," children up to three years are placed out in registered homes, and in the general report of the working of that Act the mortality of the

total is given. This does not present anything striking. It occurred to me, however, that the mortality of the children under six months must be much greater, and that it would form an interesting comparison with the mortality that occurs in foundling hospitals. Hence, by permission of the authorities, I had some statistics showing this prepared. These comprised all the infants under six months placed out in accordance with the provisions of the "Children's Protection Act," from March 1896, to March, 1898.

There were 570 under the age mentioned in all. Of these, 133 were returned to their parents, and lost sight of before they reached twelve months. Of the remainder, 228 died, all under twelve months but three, and 209 were living when last heard of. This gives a mortality for these infants of approximately fifty-two per cent. The actual mortality would probably be higher than this, for a few of those reported living had not yet reached twelve months. This result cannot be considered wholesome; it is, however, better than anything attained under the old world foundling hospital system. Moreover, the children under the "New South Wales Protection Act" labour under two disadvantages:—

1st. Owing to the small remuneration that the mothers can pay (the average, I believe, is six shillings a week) the class of guardians at their command is not of the best.

2nd. There is no provision whatever made for medical attendance on the infants, and seeing that the artificial feeding of young children forms a special branch of medicine, this is a serious drawback. At present these children are only taken to the doctor when there is a prospect of the early need of a death certificate. However, I do not for a moment wish to condemn the Act. I think as a matter of fact that we have in New South Wales one of the most efficient "Children's Protection Acts" in the world. The drawbacks I have mentioned are mere matters of detail.

We are now in a position to come to some conclusion as to the lines on which we should proceed if we wish to keep the infants in question from an early grave.

In the first place, there should be an Act in force to prevent the wholesale traffic in baby-murder that is apt to go on, such an Act we have in New South Wales, and it has done an immense amount of good in this respect.

Then, where possible, the mothers should keep and suckle their babies to the age of twelve months. After that age there should be no great trouble in rearing them.

Where the mothers are unable to suckle their infants an effort should be made to find wet nurses for them. The wet nursing should preferably be carried on in individual homes, but there is no great objection to properly-conducted wet-nursing asylums, such as, e.g., the New York Foundling Hospital, or the Ashfield Infant's Home. Should wet-nursing be impossible, the next best thing would be to have the infants hand fed in separate homes by suitable guardians, and under the immediate care of medical officers.

On no account whatever should an attempt be made to rear these children under what may be called the old-world foundling hospital system. Such a system only entails a useless expense, an enormous mortality, and untold misery.

APPENDIX.

The following facts and figures came out in evidence given before the Royal Commission appointed by the House of Lords to consider the "Infant Life Protection Bill of 1896":—

The general death-rate for all ages was stated to be 1.893 per cent.

The death-rate for all infants under one year in London from 1886 to 1892 was 15.4 per cent.

The death-rate for infants under one year nursed by their mothers in the London work-houses was 15-16 per cent.

The average mortality of hand-fed infants was stated to be about 40 per cent.; in inferior houses and rural districts 40-60 per cent.; in the insanitary areas of large towns 70-80 and 90 per cent.

The death-rate for infants under one year in houses registered under the "Infants' Life Protection Bill of 1879" was stated to be 19.7 per cent., but no account was taken of the infants that were lost sight of by removal, hence this statement is of no value as a death-rate.

The illegitimate birth-rate in England and Wales has steadily decreased from 7 per 100 births in 1845 to 4.3 per 100 births in 1891. (In New South Wales the illegitimate birth-rate is steadily increasing.)

The following is a statement of the death-rate among illegitimate infants under one year:—

Place.	Time.	Death Rate of Legitimates. Per cent.	Death Rate of Illegitimates. Per cent.
Glasgow ...	1873-1885	15.2	28.6
Manchester ...	1891-1895	17.4	39.2
Salford ..	1877-1894	17.5	37.1

The following statements were also made in answer to questions :—

Mr. Rudolf, secretary of the Church of England Waifs and Strays Society, said : " We found the rate of mortality very high when a number of infants were nursed together in one institution, so that now we board out the children separately."

The Rev. Dr. Waugh, director of the National Society for the Prevention of Cruelty to Children : " I think it is an exceedingly bad thing on many grounds to put a large number of infants of a similar age into one place. They are sure to kill one another ; by the mere atmosphere they inhale they are killed."

Mr. Barnardo, F.R.C.S., of the Barnardo Homes : " The mortality and sickness of children boarded out is very much smaller than in the case of children brought up in any other way whatever. I would not in any case consider it right to place out more than one infant under twelve months old in any house."

Miss Steer, hon. superintendent of the Bridge of Hope : " I find that babies do not get on so well by putting them together several in a house. I prefer to board them out because they get on better."

It should be said that these people were all speaking with reference to hand-fed infants.

FATAL CASE OF CHLORODYNE POISONING.

BY M. O'GORMAN HUGHES, M.B., B.Sc., B.A.
(SYD.), RESIDENT MEDICAL OFFICER, ST.
VINCENT'S HOSPITAL, SYDNEY.

C. M., aged 25, was admitted to St. Vincent's Hospital at 11 a.m. on July 15th of last year. Her friends stated that she went to bed in good health on the evening of the 14th, and that they found her unconscious next morning.

On examination it was noticed that the condition was one of complete coma. She was insensible to all external stimulation. The pupils were fixed and slightly dilated. The body was well nourished, and the skin was warm, dry and pale. The lips were slightly cyanosed. No odour was detected in the breath, and there was no corrosion of the mouth. Pulse, 90; respiration, 18 per minute; and temperature, 99° F. There was no rigidity and no paralysis of the limbs. Examination of the heart and lungs revealed nothing abnormal. The urine was acid, 1,018, and was free from albumin and sugar. Her previous history and family history were good.

An hour after admission she became cyanosed, and respiration became shallow and laboured. Ether and strychnine were given hypodermically—without any benefit, for respiration soon ceased. As the heart continued to beat, artificial respiration was resorted to and continued with slight intermissions for nearly three hours before natural respiration came on. By this time the pulse rate had reached 112 per minute. The pupils had become more widely dilated, and divergent strabismus was now noticed. The respiration remained shallow, and the pulse began to flutter. She died of heart failure next morning at 5 a.m., the temperature at death being 106° F. At the autopsy the membranes of the brain were congested. There were petechiæ in both pleuræ, and some old pleurisy on the right side. The cortices of the kidneys were narrowed, and the capsules somewhat adherent. The other organs were healthy. Analysis of the contents of the stomach revealed traces of morphine. After death an empty bottle labelled chlorodyne (not Colles Brown's) was found in her room, and then a chlorodyne habit was discovered.

The diagnosis was not easy, and it is worthy of notice that morphine remained in the stomach for at least twenty-four hours after its ingestion. It is to be regretted that the stomach was not washed out; but it was thought that, were the condition due to a narcotic poison, it was too late after the lapse of so many hours for emptying the stomach to be of any benefit.

The treatment consisted in faradism, hypodermics of ether and strychnine, and rectal injections of brandy and strong coffee. The difficulties of diagnosis lay in the dry skin, dilatation of pupils, and, at first, almost normal circulation and respiration. As many preparations of chlorodyne contain atropine, it seems probable that the latter drug was present in sufficient quantity to mask some of the ordinary signs of morphinism, and yet not sufficient to bring its own action into full evidence.

USEFUL TO DOCTORS WHO CYCLE, THE "ARIEL LUGGAGE CARRIER."—This carrier consists of two rubber bands, with which, by means of a hook and a loop, a parcel or waterproof can be instantly attached or detached to the handle-bar or an umbrella fixed to the frame. When not in use, the "Ariel Carriers" may be slipped into the tool-bag, and occupy a very small space. The Austral Cycle Agency are selling these carriers now at 1s. per pair (1d. extra for postage). The addresses of their depots will be found on page vi. in this issue.

GOLOVINE'S OSTEO-PLASTIC OPERATION ON THE FRONTAL SINUS.

By A. L. KENNY, M.B., Ch.B., HON. SURGEON
DISEASES EYE, EAR, NOSE AND THROAT,
ST. VINCENT'S HOSPITAL, MELBOURNE.

MISS E. D. *æt* 28, living with her parents, consulted me on 10th October, 1898, complaining of a foetid yellow discharge from right nostril coming in great quantity, particularly at her menstrual periods; great pain in the right half of the forehead towards the midline with apparent swelling there. The orbital wall of the right frontal sinus was acutely tender to touch. Three or four years ago, after scrubbing the ceiling of a room, patient became aware of an intermittent bad smell; the right nostril became occasionally obstructed, with pain; at times a free discharge occurred relieving these symptoms. Catamenia regular, constipated. Temperature 99.2°.

A well-developed young woman, inclined to stoutness, with an anxious, depressed expression, and anæmic. There were spurs low down on each side of the nasal septum anteriorly; the turbinals were congested on both sides, thick pus under the swollen right middle turbinal. By the naso-pharyngeal mirror all the turbinals were hypertrophied posteriorly. Quinine sulphate, with sulphate of magnesia and hydrobromic acid were prescribed, and the patient was ordered to wash the nostrils in the *Greville McDonald* position four times daily with Dobell's alkaline lotion (carbolic acid added), and afterwards to freely apply a saturated solution of menthol in albolene to the interior of the nostril whilst in the same position. At the same time the necessity for operation on the frontal sinus was pointed out. As treatment failed to relieve, Miss D. entered St. Vincent's Hospital, Melbourne, as a private patient, and, on October 28th, 1898, was anæsthetized (chloroform) by Dr. D. M. Morton. With the assistance of Dr. J. R. Loughnan I opened the right frontal sinus by Golovine's method. The eyebrows had been shaved off the day previously, and the whole forehead and parts in the vicinity carefully cleansed and rendered as aseptic as possible, according to Macewen's method (soap, turpentine, S.V.M., carbolic), and then covered with carbolic gauze, moistened with one in forty carbolic solution, covered with protective dressing and bandaged until the moment of operation. All instruments were sterilized by boiling. The

operator's and assistant's hands were sterilized by careful washing with carbolic soap in warm water, permanganate solution, oxalic acid solution, and one in forty carbolic solution. Patient's face and eyes were washed with one in 2,000 chinisol. Patient had two vertical wrinkles in the forehead, the longer running from the centre of junction of the root of nose with forehead, the shorter running from the angle of junction of nose with forehead to right of centre; this latter was chosen for a vertical incision from its commencement upwards for 2 c.m. At the junction of the eyebrows with this vertical incision a second (curved) incision was made outwards following the line of the eyebrows for 4 c.m. These incisions went to, but not through, the periosteum. The flaps of skin were reflected backwards; a rather troublesome oozing followed these incisions, caused by the protective dressing. An incision was next made through the periosteum, beginning at the upper orbital margin at the junction of the inner and middle thirds, curved so as to reach a height of 2 c.m. from the orbital margin, and ending at the root of the nose. The periosteum was *not* reflected. With a *circular cutter* the bone was cut in a curved line corresponding with the periosteal incision. The bone proved to be very dense and unusually thick, the frontal sinus was not reached until a thickness of 5 m.m. of bone had been cut through. It was first reached at the left hand junction of the curved with the vertical line. Exploration with a flat probe proved that the original delimitation of the sinus was too extensive. Owing to the thickness of the anterior wall of the sinus, very considerable difficulty was experienced in elevating the flap of bone, but, eventually, this was done with the leverage from two gouges, the flap being elevated on a hinge folding downwards and outwards. The mucous membrane of the sinus was not displaced by this manœuvre; on incision it was found to be degenerated and proliferating, presenting the appearance of a ripe bunch of currants that had been squeezed. The whole of this was detached and scooped out with Volkmann's spoons; it could not be syringed out after detachment. There was an opening into the nostril, but it was blocked by a similar condition of mucous membrane. A free opening was established, and a No. 8 self-retaining (Jacques) soft I.R. catheter was passed, presenting at the right nostril. The cavity was thoroughly irrigated and cleansed with one in 2,000 chinisol, and filled with an emulsion of iodoform in glycerine. The flap of bone, with its attached periosteum, was next adjusted and fitted accurately

in its place. The deep edges of the flaps were brought together with a buried continuous silk suture, whilst the skin edges were very carefully coated with a horsehair Marcy's suture. Iodoform and boracic acid powder were freely dusted on the wound, and an iodoform gauze dressing applied covering the forehead and occluding both eyes. There was severe vomiting after the chloroform. The temperature never exceeded 99.2°. The nostrils were washed for the first time on the night of the 30th October with one in 2,000 chinisol. The sinus was syringed for the first time on the next morning with a similar solution of chinisol, and was thence syringed daily. At intervals the sinus was filled with iodoform emulsion through the tube. A free mucous discharge was noticed, and this was increased in quantity and density after the iodoform emulsion. The dressings were removed on the 7th day—primary union had been obtained everywhere except at the extreme outer end of the horizontal incision—the horsehair sutures were removed, and a similar dressing re-applied for another week, at the end of which time union was perfect. The bony flap had healed watertight very early—no escape of fluid occurred on any occasion. All pain has been relieved, and an inodorous mucus discharge has replaced the foetid purulent one. The mark of incision is already reduced to a fine red line, and there is absolutely no depression. The sinus can be easily syringed and treated by way of the drainage tube, which will be retained until there is no sign of discharge.

Diseases of the frontal sinus, although frequently referred to in text books on diseases of the eye, properly come into the domain of those who are engaged in the treatment of diseases of the nose, and in a fair proportion of cases a successful result can be obtained by treatment through the natural passages. In those cases in which access to the sinus by the nose cannot be obtained by treatment the sinus has to be opened externally. Experiments on the cadaver and on patients have shown that in a small proportion of cases probes and other instruments may be passed through the nose into the infundibulum and so to the sinus, but several fatal cases have been recently reported in which the probe passed through the cribriform plate of the ethmoid bone, causing septic disease in the anterior parts of the brain, hence this method has now very few advocates. Many operations have been devised and practised to open the sinus from the forehead, but they are all objectionable on account of the greater or lesser degree of deformity left. The operation most frequently practised is the

Luc-Ogston—other operations are those of Kuhnt and Czerny.

In August, 1897, Golovine brought before the Section of Ophthalmology at the International Medical Congress in Moscow the operation described in this paper, calling it an osteoplastic operation for the opening of the frontal sinus with the avoidance of a depressed scar and a minimum of deformity. The operation is carefully detailed in the "Archives of Ophthalmology" for May, 1898, and in the latest volume to hand (Vol. III.) of Norris and Oliver's "System of Diseases of the Eye" is described by Dr. H. Knapp, of New York (page 927). Golovine modifies Czerny's operation.

Golovine's description, "Archives of Ophthalmology," May, 1898:—

OSTEO-PLASTIC OPENING OF THE FRONTAL SINUS.

After many experiments on the cadaver, I finally adopted the following osteo-plastic procedure:—A cutaneous incision about 4 c.m. long is made along the upper edge of the internal half of the eyebrow, and at its internal extremity another incision is made obliquely to it, following the fold of the corrugator muscle of the eyebrow. These two incisions form the letter T placed horizontally, and in depth they reach to the periosteum. The soft tissues forming the upper border of the incision can be detached and lifted up. An arched incision of about 2 c.m. in height is then made through the periosteum, the base of which corresponds to the internal third of the upper orbital ridge. The dimensions of the arch ought to conform to the proportions of the proposed opening. Then following the line of incision made in the periosteum, a small groove is hollowed out with a chisel, which does not penetrate farther than the diploë. Then, by means of a thin, flat, and very wide chisel, held obliquely, the bone is cut out without danger of entering the skull. This little piece of bone, formed from the anterior wall of the sinus, can be raised and turned back like a small shutter, the periosteum and soft tissues serving for hinges at its base. The result of this is an opening sufficiently large to admit of complete examination, and enabling one to perform a thorough curettement. A drain is passed through the nose, the small bony shutter is put back in its primitive place, the wound is sutured and dressed.

My method differs from that of Professor Czerny in the following respects:—

1. A more-simple incision of the skin than that of Czerny and Volkovitch. The cicatrix, which is very fine, is hidden in the eyebrow, and thus in no way spoils the patient's looks. This method enables one to use easily, if necessary, from the very beginning of the operation, Professor Kuhnt's manner of removing the anterior wall of the sinus.
2. Czerny uses a *cutaneous osteo-periosteal* flap, while mine is only *osteoperiosteal*, so that the incision of the soft tissues and that of the bone do not coincide. In this way is avoided the formation of a deep scar.
3. With Czerny and Volkovitch the base of the bony flap reaches to the middle of the forehead, while mine rests on the upper orbital ridge. This difference does away with all danger of perforating the skull.



FIG. I.

Diagram illustrating Golovine's Operation on the Frontal Sinus; *a*, (— shaped incision) shows line of incision in the soft tissues; *b*, (curved dotted line) incision in the periosteum.—From *Archives of Ophthalmology*.

This case is shown to-night because the operation has been so recently proposed to the profession that each case is of assistance in testing the value of the procedure, and more particularly because the operation has been so thoroughly satisfactory in realising all that was claimed for it. Golovine is of opinion that as it is more frequently performed surgeons will feel justified in using it for exploratory purposes also. A careful perusal of the description of the operation referred to before treating this patient served to suggest certain difficulties in the operation. In the first place it was desirable that the bone incision should be as narrow as possible, so that there might be the minimum loss of substance, and the closest possible junction of the edges of the bony flap afterwards. A trephine was unsuitable, as the cut was not to be circular, or even semicircular—a *parting tool* involves a greater loss of substance than was deemed advisable—an *electric circular saw* was not available, and would have been rather risky. In casting round amongst instruments and tools for a suggestion I came upon a circular metal cutter. I had one of these specially made and modified to suit my requirements, and found it satisfactory. In fact, I believe it to be a most useful instrument for many bone operations, and very much more effective and manageable than a large trephine on a curving surface. The cutting point is very fine, and every part of the incision is constantly in sight, and may be probed, etc. to estimate depth without being removed, as with a trephine. The length of the cutting arm can be changed in a moment, and by taking different centres and different lengths of arm a regular incision of parabolic shape or half curve, with nearly straight sides, can readily be made, and withal the instrument cuts much more rapidly than a trephine. Separate arms with faces to cut right or left can be easily obtained, and the instrument can be made at a very low price. It

is in its simplest condition, and no doubt can be made even more suitable for its purpose than I found it to be; it suited me well.

FIG. II.

Circular bone cutter referred to in the notes. An adaptation from a circular metal cutter. Actual size.

The second and greater difficulty was foreseen in the elevation of the flap of bone on a hinge. Golovine advised the use of a flat broad thin chisel, and did not contemplate trouble. In this case with a 5 m.m. anterior wall to the sinus (actually measured at time of operation) a broad flat chisel was simply useless—strong gouges and a disquieting amount of force were necessary. I have since performed the operation on the cadaver with a receding forehead and well-marked sinuses with very thin anterior walls—in this case there was no difficulty in elevating the bone as described by Golovine.

Lately Golovine has been submitting the sinus when opened to the action of super-heated steam—I have had no experience of this.

BLUE MOUNTAINS, N.S.W., "MOORECOURT," SPRINGWOOD.—This well-known and extensive mansion is now open as a mountain sanatorium for the reception of visitors requiring change of air with all the comforts of an English home. "Moorecourt" has an elevation of 1,250 feet above sea-level, stands in its own park of 40 acres, portion of which is laid out in shrubberies, lawns, flower and kitchen gardens, and is within five minutes of Springwood railway station. Special terms for families. Dr. Dagmar Berne is the principal.

TWO CASES OF UTERINE FIBROID TREATED BY ELECTROLYSIS.

BY CHARLES MACLAURIN, M.B., C.M. EDIN.,
HON. ASSISTANT SURGEON TO PRINCE
ALFRED HOSPITAL, SYDNEY.

APOSTOL'S method of electrolysis is now so well known, and has gained for itself so secure a position in the treatment of a certain class of uterine fibroids, that there appears to be no need to discuss its value. The account of two cases treated by it may be of interest.

Case I., aged 67, unmarried, has suffered from uterine disorder for more than thirty years. At first she had endocervicitis, which was cured after many years of suffering by the removal of the cervix. During the last ten years her symptoms have mainly consisted of pain and swelling in the abdomen, the pain being constant, worse on movement, of an aching character, but with occasional expulsive exacerbations. No treatment benefited her; she became a chronic invalid, and could hardly walk across the street. There was occasionally a slight bloody discharge, but little interference with micturition or defæcation.

On examination, a large, hard fibroid was felt, reaching above the pelvis nearly as far as the umbilicus, tender, fairly movable, and somewhat to the left of the middle line. Dr. H. N. MacLaurin and Dr. Foreman also saw her, and confirmed these observations.

The condition not being grave enough to justify hysterectomy, and as ergot had never done her any good, it was decided to try electrolysis. The first application was on September 23rd, 1897. The carbon sound (positive pole) was placed in the uterine canal, and an abdominal pad wet with salt solution was used for the negative pole. She said that a current of only seven milliamperes caused her intense pain, so that no more could then be used; but in the course of a few days the strength was gradually increased to sixty milliamperes, when she began to feel benefit, and when she could bear 100 milliamperes she felt much relief. The current employed never exceeded 100 milliamperes, and this was applied once a week for some months. The intervals were then gradually lengthened, and she now comes about once a month.

She is at present much improved in general health, and suffers little pain; she can walk a considerable distance, and is able to work a good deal in her garden. She is still obliged to rest for two or three hours every day, but as she has been a chronic invalid for half a lifetime this is not to be wondered at. The

effects upon her of the electrolysis are to produce severe expulsive pains and then a profuse discharge, often sanguineous. She then feels relief for a varying period, and often has no pain during this interval; but sooner or later the pain returns. It is, however, not so severe as formerly.

There is no local change to be felt, and I am convinced that part, both of her suffering and her relief, are of nervous origin.

Case II., aged 43, consulted me for frequency of micturition. For twelve years she had had difficulty with her water, beginning with some pain and frequency, and ending in three attacks of complete retention. She was obliged to empty the bladder every half hour, or an attack of retention came on. There was pain and flooding at the periods, and the bowels could only be moved by powerful purgatives.

On examination, a large fibroid tumour was found, the size of a full-time foetal head, impacted in the pelvis, depressing the vaginal roof, closing the cervical canal to the sound, and obviously pressing upon bladder and rectum. Drs. Graham, Watson Munro and Neill also kindly saw her with me.

A week's trial of ergot produced no effect, and as she was so near the menopause it seemed inadvisable to operate, in spite of the urgency of her symptoms.

On June 17th, 1898, she received an application of 85 milliamperes for three minutes. The end of the positive pole was placed in the posterior fornix, because the os was displaced, and could not be seen. After the application there was a profuse thin white discharge.

June 22nd, feels better; bowels have acted without purgatives, and the water passes freely, and there is less urgency. The tumour feels somewhat smaller, and is now freely movable. There has been a profuse white discharge since the application, and the os can now be seen. A current of 95 milliamperes was passed for five minutes.

Patient subsequently improved with remarkable steadiness under a current of about 110 to 120 milliamperes passed for eight minutes once or twice a week. A stronger current was found to cause blistering and ulceration of the skin, although care was always taken to see that the salt particles were thoroughly dissolved before moistening the pad with the solution. The applications were very painful, more so after two months than at first.

At the end of six weeks she went for a day's outing, and retained her water for 8½ hours, a thing she had not been able to do for years. She had one attack of retention shortly after

this, caused by getting her feet wet at her period, when the symptoms were always worse than at other times. She now passes water every four or five hours during the day, and generally once during the night; she has no pain or inconvenience, and can retain it longer if necessary. She is able to earn her living as a housekeeper.

There is not much difference in the size of the tumour, which, if anything, may be a little smaller than before the electrolysis; the great difference is, however, that it is no longer impacted in the pelvis, but has risen into the abdomen and is freely movable. This might have occurred independently of the electrolysis; but the fact that she had had pressure-symptoms for twelve years, which were only cured after electrolysis, warrants us, I believe, in attributing the change to the treatment.

There can be little doubt that but for Apostoli's treatment it would have been necessary to subject the patient to a grave operation. A method which enables us to avoid such a procedure, even if only in exceptional cases, appears to be worthy of credit, and of a more extended application than has yet been accorded to it.

UMBILICAL HÆMORRHAGE.

BY W. A. VERCO, M.B., CH.B., ADELAIDE.

HÆMORRHAGE from the umbilicus may occur at birth or soon afterwards from too loose ligation of the cord, or from its laceration, and the child may be quite pallid and in danger of death before the bleeding is discovered.

But other forms of umbilical hæmorrhage occur in the new born. The oozing may take place from the umbilicus itself, and not from the loosely-tied or torn cord. This is found in the first few days of life. But by far the greatest number of hæmorrhages occur between the fifth and fifteenth day; or, in other words, they generally start to bleed after the cord has separated from the body. In these cases the blood has probably feeble coagulability, and the umbilical vein and hypogastric arteries have not become occluded by fibrinous coagula, as they commonly are in the perfectly healthy baby. Not only is there a deficiency in the coagulability of the blood, but the infants being often unhealthy, or ill nourished, the walls of the vein and the arteries are lacking in contractility, and consequently remain more patulous than in the robust and healthy child.

The hæmorrhage from the cord or umbilicus is sometimes referable to the hæmorrhagic diathesis or hemophilia, which may be inherited, or may result from obscure causes in healthy children. Syphilis is one of the recognised causes of the hæmorrhagic diathesis in the newly born. Dr. Mracek, lecturer on syphilis in the University of Vienna, reported nineteen cases of hæmorrhagic syphilis in Neonati. They all died in from half to forty-eight hours after birth.

Other conditions predisposing to this bleeding are said to be poor health in the mother, and impoverishment of her blood during gestation by some disease, which increases the fluidity of the blood. Excessive use of diluent drinks or alkalies by the mother during gestation are also said to increase the fluidity of the blood.

Bleeding from the navel also sometimes occurs as a symptom, or complication of jaundice, and it is more particularly to this variety that I wish to draw your attention.

Writers who have collected records of this umbilical hæmorrhage have remarked the frequent occurrence of the icteric tint both before and after the bleeding, even in those who do not present the history of syphilis.

In certain cases the jaundice may be hæmatogenous, arising from the destruction of the red globules and the liberation of the hæmatin. In other instances the jaundice proceeds from the liver, and the bleeding results from the altered state of the blood, which is produced by abnormalities in the liver or its appendages. Thus in five cases of umbilical hæmorrhage collected by Jenkins, the marked jaundice which was present was found to be due to congenital occlusion of the common bile duct. It is also stated that in these cases of obstructive jaundice the biliary acids in the blood probably diminish the amount of its fibrin and increase its fluidity.

Again, Quinke states that this jaundice may be caused by a continued potency of the ductus venosus. The ductus venosus normally closes between the second and fifth days after birth; but if it remain pervious and the circulation be from any cause retarded, bile, according to the above theory, enters the branches of the portal vein, and finds its way into the general circulation through the ductus venosus. This theory also fits in with the fact that feeble infants are more liable to become jaundiced than the robust, for those vascular canals which pertain to the fetal state and are obliterated after birth are more likely to remain a longer time pervious in the feeble than in the robust.

Generally umbilical hæmorrhage is said to occur without any premonitory signs. But in forty-one out of 178 cases collected by Dr. Jenkins, jaundice was present; and it was probably obstructive jaundice, for there were also present constipation, clay-coloured stools, deeply-tinged urine, etc. In some cases there were colicky pains and vomiting. In this connection I should like to bring the following cases under your notice:—

On May 24th, 1894, Mrs. M. was delivered of a healthy girl. On the third day it developed jaundice. On the tenth day it started bleeding from the navel, and died on the eleventh day from loss of blood. The blood was very thin and poor, there being no attempt at coagulation.

On September 7th, 1895, Mrs. M. was delivered of a boy, apparently healthy in every particular. On the third day jaundice developed, and the motions became pipeclay coloured, or, as nurse described them, like cement in colour. The icteric hue gradually increased in intensity. The cord came off on the fifth day. On the tenth day bleeding commenced from the navel, and the baby died from loss of blood on the eleventh day, at exactly the same age as the previous child.

On August 12th, 1896, the same woman was delivered by forceps, while under the influence of chloroform, of a girl, the head being in the right occipito-posterior position. The baby was jaundiced at the time of birth, and had petechial on the face, arms, hands, legs, and feet. The cord was thin and flabby; the waters, membranes, and placenta were all stained yellow. The mother had been quite well beforehand, except for persistent vomiting, and made an uninterrupted recovery. The baby gradually got more petechial scattered over its body, and its motions had scarcely any or no bile in them. On the fifth day it got very bad, and breathing became quick and grunty; it was somnolent, and aroused only with difficulty; and on the sixth day it succumbed. This baby did not bleed from its navel, though I feel sure that had it lived a few days longer it would have bled as the previous ones had done.

Mrs. M.'s first baby was a girl, and it had jaundice after its birth, but not badly, and was soon all right again. It is now alive and healthy.

Her second baby was a boy, and he had no jaundice. He is also alive and well.

Her third baby was a girl. It had jaundice on the third day, but after a few days it gradually disappeared, though the discolouration was very marked.

There had been three miscarriages of from six to eight weeks. The first was after the first baby that died of bleeding, and the other two were after the second baby that died.

There was no history of "bleeders" in the family, and no suspicion of syphilis.

Mrs. G. had her first baby, a fine healthy boy. He got jaundiced a few days after birth, with light-coloured motions, etc. His cord came off on the fifth day, and everything went along satisfactorily, except for his jaundice, until the eleventh day, when he had some hæmorrhage. Some astringent powder was applied, and it did not recur.

The children that died evidently had obstructive jaundice, but whether caused by catarrh of the ductus communis, or by some congenital defect in the duct, such as obliteration or constriction, I know not. I am against the theory of congenital defect for three reasons: (1) Because the meconium was of the proper colour in all the infants; (2) because two of the babies that died did not develop their jaundice until the third day; (3) because two of her children that are alive had the jaundice and recovered completely. Unfortunately, I was unable to have *post-mortems* on the cases. Another point is that though the third baby that died did not bleed from its navel, it had little hæmorrhages under its skin, and I think quite possibly in its brain also.

The prognosis in these cases is most unfavourable. Five out of every six cases perish. Those who have jaundice or hæmophilia die almost without exception. The average duration of the hæmorrhage in eighty-two cases in Jenkins' collection was three and a-half days. In my cases the average was about thirty hours.

As to the treatment when hæmorrhage sets in, it seemed to me that nothing was of any use in the severe cases. I tried liquor ferri perchlor. and pressure over the umbilicus; also, astringent powders; I also tried the needles passed at right angles, and the ligature in a figure of eight, but bleeding slowly proceeded. If I had another case I should try covering the umbilicus with a thick layer of plaster of Paris, supporting it with the hand until it hardened, and then retain it in place by the bandage around the body.

[Dr. Litchfield has misquoted us in his opening statement. We said (Nov. 1898) "nearly 10 per cent. of the children born are *conceived* out of wedlock." The illegitimate birth rate is 6.58 per cent."—ED. *A.M.G.*]

WANTED A HARVARD SURGICAL CHAIR.—Apply stating price, to "C.M.," care editor *Australasian Medical Gazette*.

PROCEEDINGS OF BRANCHES.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE Annual Meeting was held in the rooms, the Austral Buildings, Collins-street, on Wednesday, December 21st, at 8 p.m. Present: The President (Dr. McAdam) in the chair, Drs. Springthorpe, Meyer, C. Ryan, Kent-Hughes, Loughnan, Stawell, A. V. Anderson, Officer, Cuscaden, Henry, Harricks, Lawrence, Strong, Kenny, O'Sullivan, Syme, Harbinson, Nyulasy, Willis, and J. R. M. Thomson.

The minutes of the last annual meeting were read and confirmed.

The HON. SECRETARY then read the Council's report.

"The Council for the year 1898 begs to report as follows:—

"The year has been one of satisfactory progress. The number and value of the papers read and exhibits shown have been well maintained; the attendance at meetings have reached a higher average (23) than in any previous year; greater interest has been taken in the meetings, and discussion has been more general and free.

"Two new District Branches have been added by the incorporation of the Ballarat Medical Society and the Goulburn Valley District Medical Society. Your Council congratulates the Branch upon such important additions to its sphere of usefulness and influence. Last year the Launceston District Branch brought in 24 new members, the Ballarat District numbers 27, and the Goulburn Valley 18. Other alterations in the roll of membership are: Resignations 5, transfers 2, and deaths 2. Twelve new members have been elected, and the present total is 220, and with district branches 266.

"The past year has been marked by the presence of lady members, who have already taken an active part in the work of the Branch. The introduction of discussions in place of papers has been favourably received, and the discussions upon appendicitis and broncho-pneumonia were specially successful.

"Numerous external matters of public and professional interest have received attention. The necessity for legislation as to the adoption of the new Pharmacopoeia was brought under the notice of the Government, and as a result the new Pharmacopoeia will be officially recognised on and after January 1st, 1899, and new editions may be adopted on simple notification by the Governor-in-Council. Amendments in the Poisons' Act were also dealt with, but have not received Parliamentary sanction. In co-operation with kindred societies steps were taken to bring about an improvement in the metropolitan milk supply, with the gratifying result that it is now no longer illegal to deliver fresh milk on Wednesday afternoons. Combined efforts have also been put forth against the anomalies and injustices of "Club" remuneration, and some measure of redress and reform now seems within the reach of the profession.

"Your Council desires to make special mention of the signal services to the Australasian Branches, made by our recently returned representative at the Council of the Association, Dr. Charles Goodall; and to emphasise his recommendation that if colonial interests are to be properly upheld, it is essential that our representation in the Council chamber be continuous.

"Your Council reports with regret the retirement of two of its members, Drs. Snowball and Stirling, who, after years of service, do not offer themselves for re-election.

"The outlook of the Branch is one of increasing prosperity, and the special attention of members is drawn to the recent arrangements with the Sydney Branch, by which a constant supply of representative journals will, in future, be placed upon the library table."

PAPERS READ.

- Dr. J. W. Springthorpe—Albuminuria in Life Assurance.
Notes on Typhoid and the Widal Reaction.
Dr. A. V. Anderson—The Diagnostic Signs of Typhoid.
Dr. D. McM. Officer—The Widal Reaction at the Children's Hospital.
Dr. F. Bird—A Case of Tearing Away of the Bladder from its Pelvic Connections.
Dr. Cuscaden—A Case of Puerperal Infection Treated by Anti-streptococcal Serum.
Dr. Eakins—Case of Puerperal Septicæmia Successfully Treated by Hypodermic Injections of Saline Solutions.
Dr. F. A. Nyulasy—A Case of Craniotomy Followed by Induction of Premature Labour.
Dr. O'Hara—Treatment of Stricture of Urethra.
Dr. Stawell—Pathology and Treatment of Broncho-Pneumonia.
Dr. Eiler—Iodoform Dermatitis.
Discussion on Appendicitis opened by Mr. J. A. Syme and Dr. Henry.
Dr. Hepworth—A Case of Anthrax.
Mr. A. L. Kenny—A Case of Frontal Empyema Treated by Golovine's Method.

CASES, SPECIMENS, ETC.

- Dr. J. E. Nihill—Unilateral Exophthalmos with Goitre.
Dr. Harricks—Unusual Case of Extensive Burns.
Dr. Meyer—Persistence of Branchial Clefts.
Mr. W. Kent Hughes—Sarcoma of Eyelid of Baby.
A Case of Talipes Spasticus.
Lamellar Cataract.
Absence of Fibula.
Case of Hermaphroditism.
Dr. Gertrude Halley—Coloboma of Iris.
Dr. J. W. Springthorpe—Four Round Worms passed dead during a typhoid attack.
Aneurysm of Aorta.
Mitral Stenosis.
Case of Progressive Muscular Atrophy.
Case of Double Aortic Disease.
Dr. H. Lawrence—Lupus of Pharynx invading Soft Palate and Skin of Face.
Infective Angioma.
Mr. G. A. Syme—Facial Hypertrophy.
Dr. O'Sullivan—Papilloma.
Dr. H. Lawrence—A Case of Fixed Lupus Erythematosus Cured by Mince-meeting of Capillaries followed by pressure.
Dr. O'Hara—Tumour of Sphenoid.
Excision of Scapula.
Re-section of Elbow Joint.
Hydatid Cyst of Liver (calcified).
Dr. Stawell—Microcephalic Brain.
Brain with Sub-meningeal Hemorrhage of the Newborn.
Porencephalic Brain.
Brain with Bilateral Atrophy of Convolutions of Rolandic Area.
Dr. J. H. McGee—Acquired Displacement of Heart to the Right.
Mr. A. L. Kenny—Epithelioma of Tongue.
Unilateral Exophthalmos.

On the motion of the PRESIDENT, seconded by Dr. KENNY, the report was adopted.

The HON. TREASURER then read the treasurer's report and balance-sheet:—

TREASURER'S REPORT.

"MR. PRESIDENT, LADIES, AND GENTLEMEN,—

"I beg herewith to present to you my balance-sheet and statement of accounts for the past year. I have struck the balance to-day (21st December), as it is the most convenient time, in my opinion, as the new treasurer takes over the books. The income for the year amounted to £461 0s. 9d., including a balance of £28 8s. brought forward from 1897. Of this, £294 5s. 6d. was received in respect of subscriptions for 1898, £72 9s. in payment of arrears, and £26 14s. on account of our District Branches, the larger part of which is, however, paid in advance for 1899. At the request of the Council, I produce corresponding items from last year's statement for comparison. If you look

at the statement of assets and liabilities, you will notice that our present outstanding liabilities are covered by the balance in the bank. In this statement I have not included arrears due by members, amounting to £163 2s. 6d., which might be placed to our credit, nor do I debit the account with the amount due on those arrears to the London and Sydney offices. The amount of arrears is much too large, but I have made pretty strenuous efforts to get it in. Comparisons are proverbially odious, but in this connection I should like to state that the treasurer of another Branch informs me that out of 874 members only 28 have

failed to pay for 1898. There is, again, this year a rather large amount paid as commission to the bank for the collection of country cheques. This should be saved to the Branch, as country members should always add it to the amount of their subscriptions when remitting. I am glad we have been able to keep the expenditure within the limits of our income, and, as I think we do not owe any more than is shown in my statement, the result may be considered satisfactory.

"J. R. M. THOMSON, M.B., Ch.B.,
"Hon. Treasurer."

STATEMENT OF RECEIPTS AND EXPENDITURE TO 21st DECEMBER, 1898.

DR.			CR.		
	£	s. d.		£	s. d.
To Balance, November 30, 1897	28	8 0	By Rent	47	0 0
" Subscriptions, 1898 ... [£290 18s. 6d.]	294	5 6	" Drafts to London for <i>British Medical Journal</i> ... [£207 8s. 6d.]	201	14 0
" Subscriptions, Launceston District, 1898	5	8 0	" Bank Commission on same [£2 17s.]	2	12 5
" Subscriptions, previous years (arrears) [£72 4s. 0d.]	72	9 0	" Payment to N.S.W. Branch for <i>A. M. Gazette</i> ... [£124 10s.]	146	17 0
" Rent from sub-tenants—			" Printing and Stationery, Stillwell & Co., to 31st December (18 months) [£26 19s., 12 months]	32	15 0
Melbourne Medical Association ... £15 0 0			" Caretaker's wages ...	7	16 0
Australian Health Society 15 0 0			" Cash owing from 1897 to Treasurer ...	2	2 1
Medical Defence Association .. 3 0 0			" Treasurer's expenses for 1898—		
	33	0 0	Stamps, £2 2s. 4d.; Bank Commission, on country cheques, 19s.; Gas account, 4s. 6d. [£4 15s. 11d.]	3	5 10
" Subscriptions paid in advance ...	4	4 0	" Donation to Baron von Mueller Monument Fund ...	2	2 0
" Subscriptions, Ballarat District (in advance) ...	10	10 0	" Returned cheque ...	2	7 6
" Subscriptions, Goulburn Valley District (in advance) ...	10	16 0	" Refund of portion of Subscription to an Honorary Member for two years ...	0	12 0
" Interest on deposit in Savings Bank ...	2	0 3	" Crawford for Printing ...	0	8 0
			" Danks and Son for Apparatus ...	1	2 10
			" Cheque book ...	0	2 6
			" Interest deposited in Savings' Bank ...	2	0 3
			" Balance in E.S.A. Bank 21st Dec., 1898	8	3 4
	£461	0 9		£461	0 9

(The amounts in brackets are the corresponding items in last year's statement.)

Audited and found correct,

P. B. BENNIE,

19th December, 1898.

J. R. M. THOMSON, M.B., Ch.B.,

Hon. Treasurer.

ASSETS AND LIABILITIES.

	£	s. d.		£	s. d.
To Amount deposited in Savings Bank ...	128	2 5	By Amount due to London for two members	3	3 0
" Balance in E.S.A. Bank, Essendon ...	8	3 4	" Amount due to N.S.W. Branch, two members ...	1	10 0
			" Balance ...	131	12 9
	£136	5 9		£136	5 9

Audited and found correct,

P. B. BENNIE,

19th December, 1898.

J. R. M. THOMSON, M.B., Ch.B.,

Hon. Treasurer.

On the motion of the PRESIDENT, seconded by Dr. SYME, the report was adopted.

The HON. SECRETARY then read the hon. librarian's report:—

LIBRARIAN'S REPORT.

"During the past year a partially successful attempt has been made to meet one of the chief necessities of a young library, viz., the regular supply of current medical journals. Dr. Kenny took advantage of his visit to Sydney in July to see Dr. Crago on the matter, and through the courtesy of the latter definite arrangements have been made whereby the Victorian Branch of the British Medical Association will receive regularly the following periodicals:—

Weekly—

Clinical Journal, London.

Medical Times and Hospital Gazette, London.

Boston Medical and Surgical Journal, Boston.

Fortnightly—

Indian Medical Record, Calcutta.

Indian Medical Gazette, Calcutta.

Monthly—

Birmingham Medical Review, Birmingham.

American Gynaecological and Obstetrical Journal, New York.

International Medical Gazette, Philadelphia.

Montreal Medical Journal, Montreal.

Quarterly—

Journal of Eye, Ear, and Throat Diseases, Baltimore.

Bristol Medical-Chirurgical Journal, Bristol (England).

"Several of these have already begun to arrive direct from the publishers, and it is not unlikely that arrangements may shortly be made whereby some of the more important journals (not in the above list) may be found regularly on the library table.

"FELIX MEYER,

"Hon. Librarian."

On the motion of the PRESIDENT, seconded by Dr. O'SULLIVAN, the report was adopted.

The following were then declared the officers and councillors for the ensuing year: President, A. L. Kenny, M.B., Ch.B. Melb.; Vice-President, G. A. Syme, M.S. Melb., F.R.C.S. Eng.; Hon. Secretary, W. Kent-Hughes, M.B. Lond.; Hon. Treasurer, J. R. M. Thomson, M.B., B.S. Melb.; Hon. Librarian, F. H. Meyer, M.B., B.S. Melb.; Local Editor *Australasian Medical Gazette*, J. W. Springthorpe, M.D. Melb., M.B.C.P. Lond.

In vacating the Presidential chair, Dr. McADAM congratulated the Branch upon the election of Dr. Kenny as President for the ensuing year. Dr. Kenny had served the Branch well in many important capacities, and all recognised that he was the fittest for the highest position. His own sorrow at retiring was tempered by pleasure in having to give way to such a successor.

The PRESIDENT (Dr. Kenny) was received with applause. He appreciated very highly the honour conferred upon him. Though he could not claim the maturity and ripe judgment of most of his predecessors, he yielded to none in his devotion to the Branch, and his desire to forward its interests. He again thanked them most sincerely, and would call upon Dr. McAdam to read his retiring address. (See page 1).

Dr. KENNY had great pleasure in moving that a very hearty vote of thanks be accorded Dr. McAdam, both for his invaluable work during his year of office and for his interesting address. He had filled the chair with dignity and amiability, been a consistent and diligent worker, and unsparing in his efforts to further the interests of the Branch. His final address was pregnant with valuable suggestions.

Dr. SYME had much pleasure in seconding the motion. Dr. McAdam had been a model chairman and president. His address had been an eloquent one, and its valuable matter expressed in an excellence of literary style and composition that was uncommon in such association.

The motion was carried with applause.

Dr. McADAM thanked the members most heartily. His task had been a labour of love, and he now felt *finis coronat opus*.

Upon Dr. McAdam's invitation members then adjourned to the Vienna Café, where supper had been prepared, and spent the rest of the evening as his guests.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE regular Monthly Meeting of the Branch was held at the Royal Society's Room on Friday, 23rd December, 1898, at 8.15 o'clock. Present—Dr. W. Chisholm (President), in the chair; Drs. Maguire, Litchfield, Hogg, Fiaschi, Sinclair Gillies, Flynn, Spencer, Hankins, W. H. O'Neill, Arthur, Sinclair, Thring, Chenhall, Martin, G. A. Marshall, Brady, Marano, Crago, Walker-Smith, West, J. A. Dick, Binney, the Hon. Dr. Creed, M.L.C. Visitor—Dr. Kater.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the nomination of the following gentlemen as members of the Branch:—Dr. W. C. Robinson, Cobarr; Dr. John MacPherson, Prince Alfred Hospital; Dr. E. C. Hall, Prince Alfred Hospital; Dr. E. M. Pain, Prince Alfred Hospital; Dr. N. W. Kater, Prince Alfred Hospital.

The Hon. Dr. CREED, M.L.C., read a paper on "My Experience of Hypnotic Suggestion as a Therapeutic Agent." (See p. 8).

Two patients were exhibited, and were examined by the members.

Dr. BRADY said there was nothing he need add to what Dr. Creed had said about the patient upon whom he had operated upon while hypnotised; the result was exceedingly satisfactory, and by suggestion the patient was able to control himself, and thus materially assisted in the success of the operation.

Dr. ARTHUR agreed with Dr. Creed that hypnotism was of extreme value in cases of insomnia, incontinence of urine in young children, and such like, but as regards alcoholism his experience had been disappointing, as sooner or later the cases relapsed. Of course it might be that they did not continue the treatment. With reference to the cases exhibited, they had no doubt acquired the suggestion habit, but had not really passed into the hypnotic state. In cases of morbid habit, hypnotism was very valuable. He (Dr. Arthur) remembered the case of a journalist who had passed the early part of her life in France, up to the age of 19 years, at 45 years of age she was hypnotised for neuralgia; she had always spoken in English, yet after being hypnotised she could not speak a word of English, and could converse only in French, she could not write in English either. After a time the English came back to her, slowly at first, but afterwards more rapidly. This occurred after each time she was hypnotised. This inhibition to speak one particular language was certainly very singular.

Dr. CRAGO asked in what proportion of inebriety cases did he (Dr. Creed) get permanent good results.

Dr. CREED said in about a third of the cases.

Dr. THRING asked if hypnotism had been tried by Dr. Creed in cases of vomiting in pregnancy.

Dr. CREED replied that he had not tried, but should be pleased to do so if an opportunity arose.

Dr. CHISHOLM (President): I have no doubt, and I do not suppose that any one present has any doubt, as to the genuineness of the phenomena exhibited by the patients brought here by Dr. Creed. But there was one point which struck me as rather noticeable, and that was on asking one of the patients to resume his normal condition of sensibility he did so, and I then proceeded to prick his neck with a needle to see if I could obtain any dilatation of the pupil on that side; but directly I touched the neck with the needle he flinched in a most exaggerated manner, certainly before he was pricked. The condition of these men is, in my opinion, very much the same as that of the trained subjects of the professional showman. Dr. Creed referred to the use of hypnotism to relieve the pain and muscular spasm after fractures. I have always found a hypodermic injection of morphia meet all requirements in those cases, and it does not, as a rule, require to be often repeated. Again, in the cases referred to of forcibly moving joints, what is the matter with nitrous oxide gas? The value of hypnotism as a general practical therapeutic agent will appeal differently to different minds. It is quite impossible, as it is in matters of religious opinion, for one man to convince another by argument; everyone will be guided by his own mental bias. In cases of surgical operations, it has been well contended that it is not enough that patients should be exhibited after having undergone some great surgical procedure, but that the subsequent histories of those patients should be followed and their condition stated after the lapse of some years, so that we might know if their condition has really been ameliorated. So, too, with hypnotism. I am inclined to agree with Dr. Arthur that in many of those cases of alcoholism where striking results are at first shown, the patients, in a large majority of cases, relapse after a longer or shorter time. In the etiology of alcoholism, Dr. Creed mentions sexual excesses. I am unable myself to speak from personal experience, but I have always inclined to the opinion expressed by Shakespeare, which would seem to show that he thought it was the other way about, and that alcohol "promoted desire, but took away the performance." Again, it would seem that certain of Dr. Creed's patients took alcohol for the relief of pain, such as a gnawing pain at the epigastrium. This is often perhaps so, but I am inclined to believe, as Lauder Brunton teaches, that alcohol is resorted to more as a moral anæsthetic, and he quotes the Biblical saying about giving "wine unto those that be of heavy heart." I think that asthma and sea-sickness are not good examples of diseases in which to vouch for the efficacy of any kind of treatment, seeing that they are so variable in their manifestations. We must many of us be aware how differently we are affected by sea-sickness at different times, according probably to some condition of our general health; it is so, at least, in my own case. We must be aware of attributing any amelioration of a person's sea-sickness to the fact that he has taken or done any particular thing beforehand. In those cases there is much cause to be on our guard against the fallacy of premature generalisation, and I think that we require to collect an enormous number of cases before being able to come to any useful conclusion on the subject. Hypnotism seems to me to be in the position of many drugs—they are vaunted by their introducers, spoken of with approval by others, and finally drop out of use. Now and again hypnotism has cropped up, as Braidism or mesmerism, but it never "comes to stay," as it would if it were found to be of general practical use. In this colony at

present hypnotism is dead, and will probably remain so till another travelling showman comes round and re-introduces it. As to the treatment of gastric ulcer, I shall, in spite of hypnotism, continue to treat my patients on the principle of physiological rest, and abstain from giving much food by the mouth. In conclusion, I would ask Dr. Creed if I am correct in understanding that he has treated a case of concussion of the brain by hypnotic suggestion?

Dr. CREED said the patients exhibited were not trained hypnotic subjects - one had been treated for six years and the other only a few months. With reference to the treatment of asthma and sea-sickness, which were always terribly distressing, even temporary relief was of much value. There could be no question but that there was a great deal of bias against hypnotism, but whether it had come to stay or not he (Dr. Creed) had only given his own experience. Drugs only gave relief, and a great deal had to be done by nature, the same applied to hypnotism. To say that hypnotism was suitable for all cases was simply absurd, but if quiet and rest could be given by its influence, then something had been gained, it was certainly a very great gain to him (Dr. Creed), and he intended to continue to use it.

TASMANIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

LAUNCESTON SUB-BRANCH.

THE dispute between the local Branch of the British Medical Association and the Chairman of the Hospital Board is getting a trifle warm. It began when the doctors had the temerity to suggest a reform in the internal management of the institution, and has been carried through its various stages with a certain amount of restraint. Neither party has cared about giving full expression to their views. But now all restraint has been cast aside, and unless the Premier steps in quickly and settles the difficulty there will be serious troubles. In fact, they have got very near that stage already; but it is not on the point of hospital management. It is because Dr. Johnson stated to the Premier that the Hospital Board had treated the members of the Association in a cavalier manner. The Chairman of the Board wrote complaining of that, and his letter was put before the local Branch of the Medical Association upon which they passed the following resolution:—"That the Launceston Sub-branch of the British Medical Association, after having considered the letter from the Chairman of the Hospital Board to Dr. Johnson, challenging the truthfulness of his statements to the Right Hon. the Premier, and having heard Dr. Johnson's remarks thereon, agree with that gentleman's opinion that the vote of thanks to the Hospital Board for granting a conference was merely the formal one proposed as a matter of courtesy on such occasions, and that the attitude of the Hospital Board to the British Medical Association and the profession of Tasmania, both at the conference and throughout the controversy, has been of a most unsatisfactory and cavalier character." A copy of that resolution was sent to Mr. G. T. Collins, who has published a reply, in which he says:—"There is absolutely no foundation for such a statement, and as a member of the Hospital Board, and its chairman, I avail myself of the earliest opportunity of challenging its truthfulness." Further developments of this controversy should prove interesting.

PROCEEDINGS OF OTHER SOCIETIES.

MEDICAL SOCIETY OF QUEENSLAND.

THE 142nd General Meeting was held on November 1st, 1898, in the Society's rooms.

Present.—Dr. Wheeler (President), Drs. Francis, Hill, Hopkins, Robertson, Carvosso, Love, Culpin, and Turner.

A letter was read from the Pharmaceutical Society of Queensland, acknowledging the resolution passed at last meeting, and asking the Society's support for the bill at present under consideration in Parliament.

Dr. Kerr Scott was proposed for membership by Dr. TURNER, seconded by Dr. LOVE.

Dr. HOPKINS read a paper on "Four Cases of Nephro-Lithotomy," and exhibited the stones removed.

The 143rd General Meeting was held on December 6th, 1898, in the Society's rooms.

Present.—Dr. Wheeler (President), Drs. Gibson, Love, Francis, Hopkins, Scott, and Turner. Visitor : Dr. Going.

Kerr Scott, M.B., C.M. Edin., was unanimously elected to membership.

J. A. Going, M.B.C.S. Eng., L.S.A. Lond., was proposed for membership by Dr. FRANCIS, seconded by Dr. WHEELER.

Nominations were received for office-bearers for 1899

GOULBURN VALLEY MEDICAL ASSOCIATION.

FORMATION OF A DISTRICT OF THE VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

A MEETING was held at Mooroopna on 5th October, 1898, of members of the above Medical Association. There were present : Drs. Heily, chairman (Rushworth), Tighe (Murchison), Strangman (Seymour), Reid (Nagambie), McCarthy (Tatura), Ken-Herring (Shepparton), McKenna (Shepparton), Wight (Kyabram), Kennedy (Cobram), Jas. Harbison (Numurkah), and Florence, hon. sec. (Mooroopna).

After reading apologies, and the routine business was disposed of,

Dr. HARBISON moved, and Dr. MCCARTHY seconded, and it was carried, "That a District of the Victorian Branch of the British Medical Association be formed."

It was decided that the name be "The Goulburn Valley District." Dr. Heily was elected president, Drs. McKenna and Harbison vice-presidents, Ken-Herring treasurer, and Florence hon. sec.

It was decided to hold meetings quarterly.

Dr. HEILY read a paper on "Abortion," quoting the definition of Barnes—"a practical protest of the system against gestation." The subject was extremely well handled by the Chairman, who embodied in it the experience of a life-time. Before detailing the causes and treatment of abortion, of which it is not necessary here to quote, the legal aspect of the subject was brought forward. There was much that was instructive in this particular, whether as regards the procuring of abortion, the early diagnosis of pregnancy, the various anomalies in our laws, the training of students, or the training and registration of midwives. Here, in making a quotation from the 1897 American Year Book, p. 451, it was related "how men of true science and ability are obliged by popular opinion to stand aside and view the malpractice of the ignorant midwife who undertakes the care of two lives with all their peril." Possibly the birth returns made by midwives in Aus-

tralia has not been published, but they are likely to read in a way similar to those of New York in 1891, where 24,123 birth returns (being nearly half) were made by midwives.

When speaking of the causes of abortion, the lecturer gave an account of a case of heat apoplexy—when mother and child perished in a continuous uncontrollable convulsive fit in less than two hours, although chloroform and all remedies were at hand, the event happening in the doctor's surgery. A vote of thanks was carried with acclamation for a paper replete with information.

The second meeting of the District Society was held at Mooroopna on 7th December. The business brought on was "Sweating of Medical Men." Dr. STRANGMAN first read a paper on "Lodge Agreements," after which a series of regulations for the guidance of medical men was drawn up. It was resolved to work in unison with the Medical Defence Society of Victoria in this matter.

The regulations drawn up for the guidance of members in signing lodge agreements. To be submitted to the Victorian Medical Defence Society :—

AGREEMENT.

Every medical man before entering into and signing an agreement with a lodge shall carefully peruse the same, and shall see that nothing is contained therein contrary to the rules and regulations now being determined upon. Also note that there is no omission, remembering that otherwise the rules of the friendly societies will stand in law.

EXAMINATION OF CANDIDATES, ETC.

All candidates for initiation, those joining by clearance, or re-installment upon the lodge books, must be carefully examined ; also the wife, and, if the medical man think fit, the children, and shall reject (and be at liberty to reject) any member if chronically ill.

LIST—WHEN SUPPLIED.

The lodge surgeon is to be supplied with a list of names quarterly, on the first days of January, April, July, and October, and not later, which list shall show those members of the lodge entitled to his service under the agreement.

PAYMENT.

Payment is to be made in advance, in the first week of every quarter when the list is supplied. Payment, too, shall be made when every additional name is given during the quarter.

ATTENDANCE—WHOM TO ATTEND.

The lodge surgeon shall attend members (as supplied by list), their wives and unmarried children under the age of seventeen (17) years, and their unmarried step-children or adopted children under the age of seventeen (17) years ; also the widowed mothers of single members, and the children (unmarried children) under seventeen (17) years while the said members remain unmarried and his mother resides with and is dependent upon him for support, in all cases of sickness and performance of surgical operations as specified below. The surgeon may provide patients with proper and sufficient medicine (unless there be a separate chemist's agreement), splints and bandages—but nothing else.

Attendance shall be at the residence of the sick when necessary, but should any sick person be able to attend the surgeon's residence, and it may be proper for him or her so to do, he or she, as the case may be, shall call upon the surgeon. Visits shall not be made outside a radius of one mile from the post office of the town in which the surgeon resides.

Outside the radius of one mile a charge of 5s. per mile one way, night or day, shall be the minimum charge made.

In the event of it being necessary to call in another medical practitioner, the sick person shall be at the expense of the consultation fee, provided the consent of the member or his representative is first obtained.

Should the surgeon fail to attend a lodge member not less than four hours after a notice in writing to attend is left at his residence or consulting rooms, such notice intimating that his attendance is required for sickness at the member's residence, the member shall be entitled to call in another practitioner to whom the lodge surgeon shall be responsible for payment.

The friendly societies are requested to have sick pay granted, not only to lodge members, but also to their wives and children, as thereby medical comforts may be obtained, and medical attendance rendered easier.

That in future no member having an income of £150 per annum or over shall be eligible for admission to a doctor's list.

THE LATE SIR ALFRED ROBERTS.

The following, printed in Old English type, but bearing the autograph of Sir Alfred Roberts, and the first line in his hand-writing, and in an envelope addressed by his hand, was received by a very old medical friend of his, by post, subsequent to Sir Alfred Roberts' death:—

Thanks for a firm friendship.

May I tell you how I should like to be mourned! This will explain what I think beautiful in such sorrow.

I should wish that my remembrance should never present itself before my friends without bringing some moisture to the eyes and a smile to the lips. I should like them to think of me at all hours, in the height of their joys, without disturbance, and even at the table, in the midst of their festivities, and when rejoicing with strangers, that they should mention me reckoning among their pleasures that of having loved and been loved by me. I would desire to have had enough of happiness and of pleasant qualities for them to be able to give even new friends some proof of my good temper, good sense, and good feeling; that these anecdotes might make the listener's hearts more gay, better ordered, and more contented. I should like that even to the end they should remember me thus, and that they may live long, and that they may remember me the longer. I should like to have my grave where they might come together in a beautiful season on a fine day, to speak together of me with some sadness, if they like it, but a tempered sadness which by no means excludes all joy. Above all, I could wish, and would even command, if I could, that during the last tender ceremony, in going and returning, there should be nothing lugubrious and repulsive in their thoughts and on their countenances, but that the spectacle might be such a one as it is pleasant to have beheld. What I wish, in a word, is to call forth only such sorrow as those who behold it shall neither dread to fear nor to inspire.

Sentiments expressed by Joseph Joubert to a friend, and esteemed by Alfred Roberts.

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

The Australasian Medical Gazette and the British Medical Journal are supplied to all Financial Members of the New South Wales, South Australian, and Victorian Branches Free of Cost.

Subscriptions (£2 2s. per annum) should be forwarded to the respective Branch Treasurers as below:—

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THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
H. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A. AND; L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH JANUARY, 1899.

EDITORIAL.

THE LATE SIR ALFRED ROBERTS.

It is with profound regret that we record the death of Sir Alfred Roberts, Kt., M.R.C.S. Eng, L.S.A. Lond., which occurred at Wentworth Falls, New South Wales, on 19th December, 1898.

Sir Alfred Roberts was born in 1823 in London, where his father practised as a surgeon. He completed his medical curriculum at Guy's Hospital, London, and, having passed his examinations at the Royal College of Surgeons, and the Apothecaries' Hall, with considerable credit, he practised for several years in conjunction with his father, in London. He then proceeded to Rye, in Sussex, England, where he became very popular. In 1854, "seeking fresh woods and pastures new," he arrived in Sydney,

and with his characteristic vigour and energy rapidly acquired an extensive practice. His ability and surgical skill attracted attention, and he was invited to associate himself with the Sydney Infirmary, and became a member of the Honorary Surgical Staff, a position which he held for eighteen years. It was during this period that he became impressed with the inefficiency of the nursing arrangements of the Infirmary, and thought out a plan for coping with the evil. He placed his views before the then Colonial Secretary, Mr. Henry Parkes (afterwards Sir Henry Parkes), and advised that Miss Florence Nightingale, of Crimean renown, should be invited to send out a lady superintendent and some trained nurses from the Nightingale Home, with the view that this staff should form a nucleus for the training of other young women as nurses. The result was that Miss Osburn and her small band of nurses arrived in Sydney, and from that date commenced reformation and improvement in the nursing arrangements of the Sydney Infirmary (now called Hospital), where the training of nurses was carried out, an example which was rapidly followed in other institutions, and thus formed an epoch in the production of competent and trained nurses in this colony. To Sir Alfred Roberts a debt of gratitude is due for this improvement, which was soon copied by the other colonies.

The Prince Alfred Hospital, Sydney, will ever be a standing monument to commemorate the zeal and assiduity of Sir Alfred Roberts.

We may briefly recapitulate the sequence of tragical events which led up to the inception of this structure. In 1868 the Duke of Edinburgh was on a visit to this colony, and practically the guest of the inhabitants. He was entertained at Clontarf, a pleasure resort in Sydney Harbour, and became the victim of a would-be assassin's bullet, which only failed to kill him by impinging upon a rib, and so avoiding a vital organ. The criminal was hanged, but the citizens of Sydney were shocked that the shadow of such a dastardly act should lie at their doors.

An indignation meeting of the citizens was held at which it was mooted how their solemn repudiation of this outrage should be permanently recorded. The outcome of this meeting was that, as a protest against the crime, and as a thanksgiving offering in the interests of humanity, a hospital should be either endowed or erected. To the credit of the loyal inhabitants of Sydney, be it stated, that as the result of this meeting the sum of £25,000 was subscribed.

Then came the anxious question:—How to carry this resolution into effect? It was first suggested that the sum should be expended in enlarging the Sydney Infirmary by adding a "Prince Alfred" wing. At first Mr. Alfred Roberts was inclined to support this plan, but other circumstances having arisen, and guided by his calm judgment and common sense, he was soon won over to the opinion that a special hospital should be erected to commemorate the feelings of gratitude of the populace for the Duke's recovery, and the detestation they felt for the attempted murder.

Several sites were offered, and ultimately the land now occupied by that noble pile of buildings known as the "Prince Alfred Hospital" was given by the Senate of the University of Sydney.

About this time, Mr. Alfred Roberts received the greatest blow possible in a lifetime. He lost a loving and affectionate wife. With his characteristic courage and resignation he bore up against his trial; he planned a trip to Europe, and appeased his sorrow by utilising his energy in visiting the principal hospitals in Europe, with the view of availing himself of such information as he should obtain in the designing of a hospital that would be worthy of the citizens of the premier colony of Australasia in their expression of the detestation of a crime against the Royal Family and their grief that such should have been attempted within their midst.

The result of this visit was the conception and realization of one of the most complete and elaborate up-to-date hospitals as yet constructed, and as long as stones, bricks, and mortar can last, the Prince Alfred Hospital, of Sydney, will remain a monument of thoughtful planning, incessant application, and indomitable perseverance in good work on the part of Mr. Alfred Roberts.

As a mark of appreciation of Mr. Roberts' unselfish devotion to the public interest, Her Majesty was pleased to bestow upon him the honour of knighthood.

One of the last and most important services rendered by the deceased to the Prince Alfred Hospital was the reconstruction of the operating theatre (fully described in our issue of August, 1898, page 411), so that the hospital now possesses an operating-room complete in all arrangements and appliances. As a worthy tribute for his services a marble bust of Sir Alfred adorns the vestibule of the Hospital.

In reference to Public Health Sir Alfred Roberts has rendered the community most important services. Some years ago, as executive

member of the then newly appointed Board of Health, he combatted with complete success, and with the disadvantage of not having up to date appliances, against a very serious outbreak of smallpox. To him is due the construction of the Little Bay Hospital for contagious and infectious diseases; the plans for this hospital were designed and prepared by him with the assistance of Mr. Barnett, then Colonial Architect.

In addition to the other services rendered to the community, we may add that Sir Alfred Roberts was Honorary Surgeon to the Destitute Children's Asylum until its removal to Randwick. On the foundation of the Clergy Daughters' School at Waverley he acted as Honorary Surgeon. He co-operated with the first committee in establishing the Hospital for Sick Children at the Glebe (Sydney).

At the request of the Hospital Committees of Mudgee and Glen Innes (N.S.W.) he designed plans for the hospitals in both towns.

Sir Alfred Roberts was elected to the Board of Trustees of the Australian Museum in 1858. He was associated for some time with the Committee of Management of the Technological Museum. In 1864 he was appointed a member of the Board of Visitors for the Insane, of which Board he subsequently became Chairman. He was at one time senior Medical Adviser to the Railway Department of New South Wales. He was one of the Examiners in Medicine for the University of Sydney up to the time of his decease, and for many years held the position of Chief Medical Officer for the London, Liverpool, and Globe Insurance Company.

While Hon. Surgeon to the Sydney Infirmary he had as his colleagues Drs. Charles Nathan, Bedford, Mackay, and P. Sydney Jones.

Sir Alfred Roberts was for many years honorary secretary of the Prince Alfred Hospital, a position which he only resigned a few months before his decease. His name and influence were also closely identified with the Carrington Hospital, of which he was for many years Honorary Secretary, until, on the death of Mr. W. H. Paling, he became Vice-President.

The death of Sir Alfred Roberts at the ripe age of 75 was the termination of a life of vigorous enthusiasm, in which he exhibited an ardent desire to fulfil the duties of a useful career. He realised the ideal of a cultured gentleman, the personification of courtesy, politeness, and nobility of character, combined with a strict and honorable conception of those duties and responsibilities which are in consonance with the traditions of our profession.

At the first meeting of the N.S.W. Board of Health after his death, a resolution was passed expressing the appreciation by the Board of Sir Alfred's great services both to the Government and to the country in the domain of public health, and the deep regret felt by the Board at his death.

The remains were interred at Waverley Cemetery, Sydney, in the presence of a large concourse of his former colleagues and of representative citizens.

LETTERS TO THE EDITOR.

(To the Editor of the Australasian Medical Gazette.)

EXAMINATION OF URINE IN INSURANCE CASES.

DEAR SIR,—In reply to Dr. W. R. Clay, I am inclined to think that the doctor may have been misinformed regarding instructions to Medical Examiners that the urine *must* be passed in the presence of the examiner. I am aware that some of the leading Insurance Companies, in their instructions to medical examiners, require that the urine should be voided in the presence of the examiner, *or at the time of the examination*. This applies to male and females alike.

Now I am sure no Insurance Company in the world would require that any female applicant should void urine in the presence of their medical examiner, or for the matter of that, any male applicant. All that is required is that the applicant, male or female, should urinate in a vessel at the time of the examination, and that their urine should not be sent or brought afterwards to the medical examiner, for obvious reasons to those who are familiar with life insurance, "*it is to avoid the substitution of urine.*"

Having examined a large number of female risks, I have yet to find a female applicant who objects to leave the necessary sample at the time of the examination.

The Dr. says he would feel much obliged for a suggestion. I adopt the following plan:—"I make the medical examination, &c., fill in the medical report in full, then I get the applicant to sign the form, having done this, I quietly inform her that the Company requires a specimen of her urine for examination; shew her where she will find the necessary article into which to pass it, in my consulting room or office, assure her that nothing more is required, and that after leaving the specimen she may pass out quietly and unobserved, and in the meanwhile leave her to arrange her toilet, etc.

I am, yours truly,

B. L. FAITHFULL,
Chief Medical Referee,

The Mutual Life Insur. Co. of New York.
15th December, 1898.

REGISTRATION OF NURSES.

(To the Editor of the Australasian Medical Gazette.)

SIR,—It has been decided by the Board of Management of this hospital to have published annually in the colonial medical journals a complete list of the nurses who have obtained their certificates in the training school of this hospital. This is an attempt of the

nature of an experiment to supply medical men with a list for reference, so that in any case of doubt there would be a ready means by which to decide. Cases have come frequently before my notice where women who have never been trained, or who have been trained very imperfectly, have successfully passed themselves off as trained nurses, and by their ready wit are making a good business of nursing. Surely the properly trained nurse requires protection against such as these, just as the medical profession does against quacks. The remedy lies a good deal in the medical man's hands, but a little delicacy on his part (whether proper or not) may prevent him from inquiring thoroughly into their *bond fides*. To assist him, and also for the protection of nurses and patients, a register of all properly certificated nurses would be of great service. A compulsory registration of all trained nurses would be the most satisfactory solution of this difficulty, but until this could be brought about would it not be advisable for the medical journals to take the matter up and publish annually, in the December or January number, a list of those nurses up to date who have obtained their certificates in the various training schools of the colonies?

With regard to nurses trained in England and other countries, I can see no solution other than registration. Some good ought to result from dealing as suggested with nurses trained in our colonial schools, and a step in this direction might be taken.

I am forwarding a complete list of nurses (see advt. columns, page xxi.) who have received their certificates in the training school of this hospital to the publishers of the *Australasian Medical Gazette*, and in doing so am communicating with you to inquire as to whether there is any likelihood of such a scheme as this being carried out satisfactorily.

Trusting that you will give the matter your favourable consideration, I remain, yours sincerely,

J. RAMSAY, M.B., Ch.B.

Surgeon-Superintendent.

General Hospital, Launceston, 20th December, 1898.

PUBLIC HEALTH.

AN outbreak of typhoid fever has occurred at Canterbury, near Sydney.

At a meeting of the Hobart Central Board of Health on December 16th, the Secretary stated that he was in correspondence with authorities in the other colonies as to the practice of requiring medical certificates before burial. The President said he was astonished and alarmed when he learned that burials actually took place in this colony without medical certificates being first obtained. Dr. Bright said that in the country many deaths took place without any doctor having attended at all. The Secretary said he found that in some of the other colonies a declaration made by some creditable witness in the neighbourhood was required in such cases. The Secretary read the communication sent to the Education Department requiring precautions being taken in cases where teachers suffered from infectious diseases as well as the children, and recommended the framing of a regulation in regard thereto. The Secretary to the Education Department was attending to the matter. The recommendation of the medical profession that upon the present President of the Board resigning, a medical man should be made president, was discussed; also the question of whether a salary would be required. Eventually it was agreed to recommend the proposal to the favourable consideration of the Government. The proposal of the Local

Board of Health to send the nightpan collections to Glenorchy, and the opposition of the Glenorchy people, was referred to, and the correspondence read. The Secretary stated that he had now been informed by the Mayor that the City Council had decided that the nightsoil should go down the river as before, so the trouble was at an end. Dr. Crouch said that the Glenorchy people were blaming the Central Board of Health in the matter; but it was the Glenorchy Local Board of Health's fault. The latter Board first assented in writing to the obnoxious stuff going to Glenorchy. The Secretary said that the Hobart Local Board of Health applied also. This Board had nothing to do but act as arbiter between them. One local authority applied for consent, and the other assented. Dr. Crouch said that he was told that the Glenorchy people blame the Central Board instead of their own local authority. The Secretary read a correspondence started by Dr. Mackenzie, of Strahan, writing to him, and sending tins of pasteurised milk and cream retailed there, and put up at Invercargill, New Zealand. The milk was alleged to have caused several illnesses in the shape of vomiting and stomach troubles, and it was desired to have the milk analysed. He (the secretary) forwarded the same to the public analyst (Mr. Ward), who reported that the vomiting might have been due to boracic acid used in the milk as a preservative, or to the incomplete action of the pasteurising process. The bad smell emitted when the tin sent him was opened led him to think that the milk might not have been fresh when pasteurised. He certainly found boracic acid in the milk. Continuing, the Secretary said that Dr. Mackenzie urged that the Central Board should take some steps in the matter. The supply of fresh milk was so scarce on the West Coast, that much of the tinned article was used. He had also sent a tin of pasteurised milk put up at Emu Bay, and which was reported to be very good; but he wanted that analysed also. Mr. Ward was not yet ready with his report as to that sample. Dr. Bright asked if we could prohibit the sale of badly-tinned milk. The Secretary said that they most certainly could. Dr. Bright thought it could not, at any rate, be done on the vague report of the analyst just read. The analyst should show how much boracic acid was in the milk—whether it was present in injurious quantities or not. Consideration of the matter was postponed, pending further information from the analyst.

The Health Officer of the town of Unley, S.A. (Dr. H. H. Wigg), presented his annual report for 1898 at the Council meeting recently. He stated that "the population, as estimated by the Registrar-General, stood at 13,286, but the figures of the Town Clerk, which took into account ninety-seven new houses erected during the year, made it 15,527, which was probably more nearly correct. There was a startling decrease in the number of births, for, with an increased population, there had been sixty-six fewer births than last year—383 only, compared with 449 for last year—or an average of 24.2 per 1000 of the population, a percentage which was rapidly approximating that of France. This reduction was not due to the spread of Malthusian principles alone, but to a deplorable increase in criminal abortion, which had caused the deaths of several women in this town this year, and which, directly or indirectly, were due to the presence in Adelaide of numerous professional abortionists. During the year 203 deaths had occurred, or twenty-three in excess of last year, giving a death rate of 15.2 per 1000. The infant mortality table showed that of fifty-five deaths of children under one year of age, twenty-four died from diarrhoea and dysentery, which were largely preventable diseases,

and due in a great measure to improper artificial feeding of infants, and in this respect the unsatisfactory system of dairy licensing and inspection of the town of Unley and neighbouring corporations was accountable for many of the deaths from diarrhoea and dysentery, as well as diseases of a tubercular nature of which there were eleven cases. The deaths from diarrhoea and dysentery in children were more numerous in Unley than in most of the other suburbs. He attributed this to faulty regulation for the sale and distribution of milk. The sooner the oversight of dairy cows and dairies came under a competent central authority the better for all concerned. No dairy should be allowed to use cows which had not satisfactorily passed the tuberculin test to show their freedom from tubercular disease."

VITAL STATISTICS.

SYDNEY.—There were 980 births and 631 deaths registered in Sydney during November. The principal causes of death were:—Measles, 12; diphtheria, 1; typhoid fever, 1; bronchitis, 17; pneumonia, 29; cancer, 35; phthisis, 39; whooping cough, 64.

MELBOURNE.—The chief causes of death in greater Melbourne during November were as follows:—Measles, 8; diphtheria, 10; cancer, 37; phthisis, 63; whooping cough, 14; bronchitis, 11; typhoid fever, 5; pneumonia, 45. There were in all 978 births and 675 deaths registered during the month.

BALLARAT.—There was 1 death from whooping cough, 5 from cancer, 3 from phthisis, 4 from bronchitis, and 14 from pneumonia during the month of November.

ADELAIDE.—There were 67 births and 82 deaths in Adelaide during October. The principal causes of death were:—Measles, 5; whooping cough, 15; cancer, 4; phthisis, 6; old age, 6; pneumonia, 6.

NEW ZEALAND.—In the four boroughs of Auckland, Wellington, Christchurch, and Dunedin there were, during November, 2 deaths from measles, 14 from cancer, 20 from phthisis, 8 from bronchitis, and 3 from pneumonia.

BRISBANE.—During the month of November there were 9 deaths from measles, 8 from scarlet fever, 5 from typhoid fever, 1 from dengue fever, 6 from whooping cough, 5 from diphtheria, 7 from cancer, 8 from phthisis, and 10 from pneumonia.

HOSPITAL INTELLIGENCE.

THE LAUNCESTON HOSPITAL DIFFICULTY.

The Hobart Mercury, for 16th ultimo, states:—

"It is quite evident that the members of the Hospital Board are anxious to conciliate the local Branch of the British Medical Association. They cannot agree to all the reforms which the latter body wish to see effected in the medical supervision of the General Hospital; but they have admitted that some change is necessary by increasing the honorary staff from three to five, and by relaxing in some measure the rules which hitherto placed the 'honoraries' under the supervision of the young men, who for the time being had charge of the hospital. It has already been decided that any member of the honorary staff may take charge of a special case or carry out an operation at the hospital so long as the surgeon-superintendent approves; but it is now proposed to go a step further, for at the Board meeting last night Mr. B. L. Parker gave notice

to move at next meeting,—'That the surgeon-superintendent be instructed to set apart beds in the hospital for the use of patients nominated, when the state of the hospital admits, by the honorary consulting surgeons, who shall have the medical and surgical charge of such patients, subject to the right of the surgeon-superintendent, or, in his absence, the house surgeon, to prescribe for and attend such patients whenever they shall consider it necessary in the interest of the patient to do so.' This will be a step in advance, but it does not go far enough to satisfy the majority of the Medical Association. What they want, and they are confident they will ultimately get it, is that the resident staff should be under the supervision of a properly-organised honorary staff, who would be responsible for the proper treatment of all the patients in the hospital. When that reform is made the best surgeons and physicians in the city will readily give up their time to hospital work, and the Board will have no difficulty, as they apparently have at present, in getting five medical gentlemen to form the honorary staff.

"Further reference was made at the Hospital Board meeting last night to the allegation made by Dr. Johnston, that the Board had received the deputation from the local Branch of the British Medical Association in a cavalier manner. The chairman (Mr. G. T. Collins) denied that any discourtesy had been shown the deputation; and the members of the Board, while regretting that any difference of opinion on a matter of fact should exist between the Board and the medical profession, approved of the chairman's action all through the business.

"Drs. Pike, Pardey, Holmes, and Parker were elected as honorary consulting staff for the ensuing year."

MILITARY INTELLIGENCE.

NEW SOUTH WALES.—Lieutenant Hugh Kirkland has been promoted to be Captain in the New South Wales Army Medical Corps.

NEW ZEALAND.—His Excellency the Governor has been pleased to approve of the undermentioned appointments:—*Oamaru Rifle Volunteers*: James Whitton to be Surgeon-Captain. *No. 3 Company, Ohinemuri Rifle Volunteers*: Thomas Nesbitt Wright to be Surgeon-Captain.

QUEENSLAND.—His Excellency the Governor directs it to be notified that he has been pleased to appoint Alexander Jack, M.B., of Townsville, to be acting Sub-Lieutenant in the Queensland Defence Force (Marine).

LITERARY NOTES.

From Messrs. George Robertson and Co. we have received a pamphlet entitled "The Early Decay of Children's Teeth, with Suggestions as to its Causes and Prevention," by Leonard W. Bickle, F.R.C.S.E., of Adelaide. It contains some interesting remarks on a very important subject.

Messrs. Angus and Robertson have sent us Mr. Sydney Webb's lecture on "Municipal Development in England," which is published in pamphlet form. It is extremely readable, and of great interest at the present time.

We have received a small pamphlet entitled "The Crusade Against Consumption; Hints on its Prevention and Cure," by James Jamieson, M.D. It contains nothing new or original. It is published by the Australian Widows' Fund Life Assurance Society.

OBITUARY.

ARCHIBALD MARTIN MACFARLANE, M.B. 1880, Ch.B. 1889, Melb., died at Robe, S.A., on November 20th.

ROBERT MCGOWAN, L.F.P.S. Glas. 1851, died at Mallala, S.A., on November 10th.

AUGUSTUS MUELLER, M.D., Ch.D. Giessen, 1854, died at Yackandandah, Vic., on January 1st. Dr. Mueller, who had lived in Australia for 36 years, was well known for his researches on snake-bite, and as the proposer of the strychnine treatment. He had practised at Yackandandah for many years.

ROBERTS, SIR ALFRED, Kt., M.R.C.S. Eng.; L.S.A. Lond.; died at Wentworth Falls, N.S.W., on December 19th, 1898. (*Vide p. 38*).

CHANGE OF ADDRESS, ETC.

BLACKBURN, Dr. G. N. S., has gone to White Cliffs, N.S.W., in conjunction with Dr. Atkins, of Wilcannia, N.S.W.

CARBERRY, Dr. A. R. D., has commenced practice at Opunake-road, near Lovatford (Taranaki), N.Z.

CUTBERT, Dr. M. T., has removed from Eidsvold to Brisbane, Q.

FISHER, Dr. W., has removed from Toowoomba to Brisbane, Q.

FREDERICK, Dr. H. J., a recent arrival, has settled at Niagara, W.A.

HALFORD, Dr. A. C. F., has left the Brisbane Hospital, having been appointed Resident Surgeon to Peak Downs Hospital, Clermont, Q.

HENRY, Dr. A., late of Narrabri, N.S.W., has commenced practice at Manly, near Sydney.

HUGHES, Dr. O'GORMAN, has commenced practice at No. 6 Point Piper-road, Paddington, Sydney.

LEE, Dr. J. R., has succeeded to Dr. Fenton's practice at Omeo, Vic.

MAXWELL, Dr. C. M., has commenced practice at Wahroonga, near Sydney.

NAYLOR, Dr. H. G. H., has removed from Melbourne to Auckland, N.Z.

PETERS, Dr. ANDERSON, has left Sydney, N.S.W., for Gympie, Q.

SPENCE, Dr. H., has removed from Footscray to Strathmerton, Vic.

WARREN, Dr. J. M., has removed from Westport to Temuka, N.Z.

YOUNG, Dr. TAYLOR, formerly of Grafton, N.S.W., has returned to the colony after an absence of two years in Europe.

MEDICAL APPOINTMENTS.

The following medical appointments are announced :—
Obason, Herbert, M.B.C.S. Eng., &c., to be Assistant Medical Superintendent of the Hospital for Insane, Goodna, Q.
Cooks, C. Cary, M.D., &c., to be Government Medical Officer and Vaccinator for the district of Wentworth, N.S.W., *vice* Dr. H. Breton, resigned.

Cope, Dr. H. R., to be Resident Medical Officer at St. Vincent's Hospital, Sydney.

Freyer, J. K. L. et L.M.R.O.S. Irel., &c., to be Government Medical Officer and Vaccinator for the district of Tenterfield, N.S.W. *vice* Dr. R. J. Morice, resigned.

Halford, A. C. F., M.D., &c., to be Resident Surgeon, Peak Downs Hospital, Clermont, Q.

Hart, J. W., M.B. Edin., &c., to be Government Medical Officer and Vaccinator for the district of Bingara, N.S.W., *vice* Dr. G. C. Cary, resigned.

Kenny, Dr. A. S., to be Medical Superintendent of the Government Sanatorium at Rotorna, N.Z.

Lee, J. R., M.B., &c., to be Officer of Health for the shire of Omeo, Vic., *vice* Dr. J. L. Fenton, resigned.

Sheldon, Dr. H., to be Resident Medical Officer, St. Vincent's Hospital, Sydney.

Spence, H. M.B., &c., to be Public Vaccinator at Strathmerton, Vic., *vice* Dr. B. B. Hoggan, resigned.

Walden, F. J., M.B. Edin., &c., to be Officer of Health of Sorell, Tas.

MEDICAL RESIGNATIONS.

The following medical resignations are announced :—

Breton, Dr. H., as Government Medical Officer and Vaccinator for the district of Wentworth, N.S.W.

Cory, Dr. G. C., as Government Medical Officer and Vaccinator for the district of Bingara, N.S.W.

Fenton, Dr. J. L., as Officer of Health for the shire of Omeo, Vic.

Hoggan, Dr. B. B., as Public Vaccinator at Strathmerton, Vic.

Halford, A. C. F., M.D., &c., as Resident Medical Officer, Brisbane Hospital, Q.

Hughes, Dr. O'Gorman, has resigned his appointment as Resident Medical Officer to St. Vincent's Hospital, Sydney.

Morice, Dr. R. J., as Government Medical Officer and Vaccinator for the district of Tenterfield, N.S.W.

REVIEWS.

MEDICAL DISEASES OF INFANCY AND CHILDHOOD.

By Dawson Williams, M.D. Lond., F.R.C.P. Lond., Physician to the East London Hospital for Children, Shadwell, London, Paris, New York and Melbourne; Cassell and Co., Limited, 1898. Price, 10s. 6d.

The object of this handbook is stated in the preface to be to give to young practitioners of medicine, and to those who have not previously paid much attention to the subject, a guide to the clinical study of disease as it occurs in infancy and childhood. The work does not attempt to compete with the large manuals published in England and the United States of America, but its contents are limited to suit the requirements of those who wish to make themselves acquainted with the fundamental principles of children's diseases.

Opening with a chapter on the growth of the child, and the influence of sex, sleep, clothing, baths, change of air, etc., we are carried on to the physical examination of the various parts of the body, the diseases incidental to birth, and the feeding of children. This last chapter we should like to see extended—what there is good, but it should be fuller—for the feeding of children is more important than the treatment by drugs in many cases.

The chapters on acute specific infectious diseases are well done. Tuberculosis is the subject of four chapters extending over about fifty pages. There is a very interesting account of this fatal and, unfortunately, prevalent disease. Fresh air is recommended as the best treatment. Syphilis, rheumatic fever, chorea, rickets, and diseases of the various organs are duly considered. The chapter on hydatid disease has been revised by Mr. G. E. Twynam, formerly of the Prince Alfred Hospital, Sydney. The various nervous and skin diseases also come in for their share of consideration.

There are eighteen full-page plates and eighteen illustrations in the text. These add considerably to the value of the work.

We have no hesitation in recommending this little manual to the profession in Australia. It is written in plain graceful language, and in most cases the descriptions of the various diseases are full. There are many notes on diseases of children intended for the junior practitioner, but we consider Dr. Williams's work equal, if not superior, to the great majority of them.

There is a useful appendix containing a number of prescriptions and recipes.

THE PRACTICE OF SURGERY: A TREATISE ON SURGERY, FOR THE USE OF PRACTITIONERS AND STUDENTS. By Henry R. Wharton, M.D., Demonstrator of Surgery in the University of Pennsylvania; Surgeon to the Presbyterian and the Children's Hospital, &c., &c.; and B. Farquhar Curtis, M.D., Professor of Clinical Surgery in the New York Post-Graduate Medical School, and the Women's Medical School of the New York Infirmary, &c., &c. Profusely illustrated. Philadelphia: J. P. Lippincott Company. London: 6 Henrietta-street, Covent Garden. Sydney: C. Markell and Co. 1898. Price. 27s. 6d.

This book, which consists of 1,240 4to pages, is divided into 38 chapters, and contains in a condensed form an account of the whole field of surgery, beginning with Surgical Bacteriology, and ending with the "Surgery of the Female Genitals." The object aimed at by the authors of this book has been eminently practical. They recognise the fact that to give a synopsis of the science of surgery in one volume becomes each year a more difficult task, owing to the extension of the field of surgery since the adoption of aseptic methods. It seemed to them that the essential information included (1) a description of the various injuries and surgical diseases sufficiently full to enable the practitioner to recognise them when met with in practical work; (2) Full directions for the treatment of such injuries and diseases as would usually be attended by the general practitioner. (3) A sketch of the treatment of the more difficult conditions such as would allow the practitioner to advise patients intelligently in obtaining special skilled surgical attention.

The chapter on the Injuries and Diseases of the Eye was prepared by Professor George E. de Schweinitz. The majority of the illustrations used are original, and were made from photographs or drawings. The work is admirably arranged, and is printed in clear type on good paper, and is well up to date in Aseptic and Antiseptic Surgery, and is well worthy of a place on every surgeon's bookshelf.

OUTLINES OF PRACTICAL SURGERY. By Walter G. Spencer, M.B., M.S., F.R.C.S., Surgeon to the Westminster Hospital. London: Baillière, Tindall and Cox, 1898. Sydney: L. Bruck. Price, 12s. 6d. net.

We are well pleased with this work. We have kept it by our side on our consulting-room table as a work of reference, and we are thus enabled to speak highly of the contents. Practical subjects only are dealt with; details of pathology and bacteriology being left to the special writers on these subjects. It is the kind of book we wished for in our student days.

The first chapter deals with the treatment of wounds, and is an excellent synopsis of the various methods employed. The second chapter is devoted to anaesthesia, but though the A.C.E. mixture is referred to, its composition is not mentioned; otherwise this is a well-written chapter. Then follow in part I. sections on the surgery of the blood-vessels nerves, skin, muscles, and fractures and dislocations, bones and joints, amputations and disarticulations.

The second part contains the practical surgery of the various systems and organs.

The illustrations, which apparently are original, are a feature in the work. Being white upon a black ground they appear to the eye more readily than the ordinary black line drawings, although they may not appear so artistic. Every senior student and resident medical officer in hospital, as well as the general practitioner, may keep himself up to date by means of Mr. Spencer's manual.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Amess, James, M.D. Univ. Melb. 1885; Ch.B. Univ. Melb. 1886.
McGee, William, Lic. R. Coll. Surg. Irel. 1882; Lic. et Lic. Midwif. 1883; K. et Q. Coll. Phys. Irel.
Maxwell, Charles Mayne, Mem. R. Coll. Surg. Eng. 1878; Lic. Soc. Apoth. Lond. 1880; M.B. et Mast. Surg. Univ. Aberd. 1882.

For Additional Registration.

Bohrsmann, Gustav, Hall, M. Ch. Univ. Sydney 1898.
Ipscomb, Thomas, Walter, M. Ch. Univ. Sydney 1898.
Kater, Norman William, M. Ch. Univ. Sydney 1898.
MacPherson, John M., Ch. Univ. Sydney 1898.

NEW ZEALAND.

Carbery, Andrew Robert Dillon, L.R.C.S.I., L.R.C.P.I., L.M.
Good, Hardman Allgood, M.R.C.S. Eng., L.R.C.P. Lond.
Kenny, Alexander Symonds, M.R.C.S. Eng.
Liddell, Gavin, M.B., C.M. Edin. Univ.
MacDonald, William Marshall, M.B., O.M. Univ. Edin.
McAllum, Harold Guthrie, M.B., B.S. 1894. Univ. Dorn.
Naylor, Henry George Horace, L.R.C.S. Edin., L.R.C.P. Ed., L.M.

QUEENSLAND.

Heyward, William Beaumont, M.B. Univ. Melb. 1897; Ch.B. Univ. Melb. 1898.
MacDonald, Alexander Joseph, M.B. Univ. Toronto, 1898; Memb. Coll. Phys. Surg. Ontario 1898.
Morton, Alfred Watson, Lic. R. Coll. Phys. Edin. 1898; Lic. R. Coll. Surg. Edin. 1898; Lic. Fac. Phys. Surg. Glasg. 1898.
Pardey, Charles William, M.B. Univ. Melb. 1898; Ch.B. Univ. Melb. 1894.
Peters, Alfred James Anderson, Lic. R. Coll. Phys. Edin. 1892; Lic. R. Coll. Surg. Edin. 1892; Lic. Fac. Phys. Surg. Glasg. 1892.

SOUTH AUSTRALIA.

Broyer, Walter Henry Grant, L.R.C.P. & S. Edin.; L.F.P. & S. Glas. 1896.
Spring, William Ambrose, M.B. Melb. 1898.

TASMANIA.

Maw, Henry Solomon, L.S.A. Lond. 1895.

WESTERN AUSTRALIA.

Birmingham, William Payne, M.D. Dublin 1894 (additional qualification).
Belgrave, Thomas Bowerman, M.R.O.S. Eng. 1858; L.S.A. Lond. 1858; M.D. Edin. 1864.
Frederick, Herbert John, L.R.C.P. 1893; M.R.O.S. Eng. 1893.

BIRTH, MARRIAGE, AND DEATHS.

BIRTH.

IRWIN.—On the 18th December, at Boulder, W.A., the wife of Henry Offley Irwin, M.B., of a daughter.

MARRIAGE.

BOBARDT—HOLDSWORTH.—On the 4th January, at St. John's, Darlinghurst, Sydney, by the Rev. Canon Pain, Albert O. Bobardt, Surgeon Royal Navy, to Florence, youngest daughter of the late Richard Holdsworth, "Woodbourne," Elizabeth Bay.

DEATHS.

MACFARLANE.—On the 20th November, at Robe, S.A., Archibald Martin MacFarlane, M.B. Melbourne University, aged 45 years.
MCGOWAN.—On the 10th November, at Mallala, S.A., Robert McGowan, L.F.P.S.G. and L.M., aged 68 years, the beloved husband of Ada Jane McGowan.
PHILLIPS.—On the 9th January, at her residence, "Thilington," Smith-street, Parramatta, Sarah Jane, dearly beloved wife of George H. Phillips, M.R.C.S., &c., and daughter of the late William T. Pearce, of Kingslangley, Seven Hills.

CLINICAL RESEARCH.—Dr. Litchfield is prepared to make examinations for medical men as follows:—1. Diphtheria bacilli, 2. Tubercle bacilli, 3. Widal's reaction. All information supplied by the above at 118 Glebe-road.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

VALEDICTORY ADDRESS OF THE PRESIDENT, T. W. PAIRMAN, L.R.C.P., ET L.R.C.S. ED., LYTTEL- TON, N.Z.

READ AT THE CANTERBURY SECTION OF THE NEW
ZEALAND BRANCH OF THE BRITISH MEDICAL
ASSOCIATION.

GENTLEMEN,—In retiring from the Presidential chair I have to tender you my sincere thanks, in the first place for putting me into such a position of honour, and in the next for your kind indulgence and assistance during my tenure of office. By choosing as president one who resides nearer the periphery than the centre of local intellect you have shown a liberality of spirit, not only commendable in itself, but indicating a desire to recognise whatever merits a "secondary ganglion" may possess. Such recognition has a decidedly stimulating effect on the chosen ganglion, and I am not without hope that the generated force may act beneficially on the higher centres themselves. This is only in accordance with physiological principles, for one method of developing the brain cortex—that ruling power of the economy—is to bring into healthy activity the subordinate elements. And I trust the precedent of choosing your president from the periphery may be followed in future years. One of the great objects of the British Medical Association is to harmonise our profession into a living organism, so that impulses generated in one centre may sympathetically play on all the rest, and it is only by the constant activity of each individual member that we may hope to maintain its vitality.

Medicine is such a far-reaching and complicated science that an association such as this becomes an absolute necessity. In strong contrast to the other learned professions ours is bound by no ritual, is circumscribed by no statute. Its practice is not the solution of a mathematical problem with premises constant and exact, but the reading of a book in movable types set in different media, and played upon with parti-coloured lights. The eye of the Anableps is so constructed as to see partly in air and partly in water at the same time—a kind of mechanical aid to sound judgment. The physician, forsooth, is not so richly endowed, but by cultivation and experience, long-continued observation and experiment, and I may add, discussion with his fellows, he finds himself finally justified in drawing a conclusion. For

man, being a living thing, is subject to ever-varying conditions. External agents affect him differently at different times, and internal forces are constantly at work developing new phases of one and the same thing. Even the diseases to which he is liable, depending mainly as they do on living germs, must inevitably present a moving picture. In epidemics do we not frequently observe a well-marked change in the type of disease, subordinate presumably to some physiological change in the germ itself? The first cases are generally severe, resisting all treatment and ending fatally; but in course of time the disease becomes milder, yielding to any remedy or none, and terminating in recovery. How necessary then to meet periodically in order to discuss and ventilate the ever-varying aspects of disease which are constantly presenting themselves in every-day practice.

We live in an age of such rapid progress that scarcely a month passes without our finding in the medical journals something to arrest our attention. Never has there been such a multitude of earnest workers in our field of science, who, at the expense of infinite labour, have devoted their lives to the discovery of truth. The mass of new material presented to our minds is enormous, and would be hopelessly confusing were it not that we can refer much of it to general principles. It is a tremendous advance when we can weave a principle out of a tangled mass of disconnected facts, and it is matter for congratulation that every year we feel ourselves treading on firmer ground. The quaint ideas and philosophic theories of our forefathers are passing away; their very language is becoming obsolete, and the books of last generation have been consigned from the library to the museum.

But of all the advances of recent times the discovery of germs and their intimate connection with disease is far and away the most prominent. This one discovery has solidified a mass of disconnected knowledge, modified our opinions and our treatment, and strengthened our aptitude for the battle with death. It is safe to say that the brilliant researches of Pasteur have accomplished for medicine what the law of the conservation of energy has done for mechanics or the principles of evolution for biology. And it is interesting to observe, as illustrating a curious law in the progress of human knowledge, that this comparatively recent germ theory is but a revival of the most ancient hypothesis of the cause of disease. This was the presence of some definite entity exerting

its malign influence from without, in contradistinction to some primary molecular change in the body itself. This idea was universal among mankind, and survives in many savage races to the present day. We ourselves still speak of an apoplectic "seizure," an "attack" of rheumatism, and so on. With our brains so moulded and impressed with these particular lines of thought can we wonder that when the germ theory was announced it should have appealed so forcibly to our minds, and been received with such ready acceptance? It was like reading an old school book with the understanding of age, the crystallising of an acknowledged principle enunciated by our remote ancestors. And so nature lays her foundations.

This idea of seeking the cause of disease external to and independent of the body has opened up a vast field for original research. The science of bacteriology has been established in our day, and already we are reaping rich harvests from its ripening grain. "The pestilence that walketh in darkness" is no longer that dread mystery that overwhelmed the nations, for at last it has yielded the secret of its power. By the introduction of a simple germ-proof filter typhoid fever has been eradicated from the French army; by the isolation of a diseased cow an epidemic of diphtheria has been stopped; and by adopting measures of prevention for other diseases equally satisfactory issues have ensued. Are not these indeed great results? When we come to consumption we are astonished at the wave of light that has passed over this disease in quite recent times. If our medical forefathers were assured of one thing it was that phthisis arose in the body *de novo*, and was hereditary. Both these assumptions have been practically exploded. Remembering the ravages phthisis has accomplished in the world's history, the hopelessness of the physician when forced to fight it, and the conservative opinions long held regarding it, we cannot but view with satisfaction the present attitude of the profession towards it. That this disease, like many others, is often contracted from our domestic animals is becoming more and more apparent every day. The diagnostic value of tuberculin has happily been established, and the day is not far distant when compulsory testing of animals will be enforced. It is our province meanwhile to disseminate among the masses the great facts of practical hygiene, and to enlighten our legislators on all that appertains to the health and well-being of the community. Let us not rest till we see the erection of public abattoirs, the scientific inspection of dairies, the proper sanitation of schools, and the

appointment of medical officers of health throughout the country. To attain these ends we have a hard battle to fight. Ignorance, prejudice, vested interests, and that inertia of indifference to sanitary progress so prevalent in our midst, have all to be contested and overcome. An epidemic of preventable disease, in view of our present knowledge, is a disgrace to our civilisation.

But, gentlemen, if we were wrong in assuming the cause of disease as a primary molecular disintegration of the organs, we have been long in discovering that the remedy for many diseases lies within the body itself. Hitherto we have gone far afield into other kingdoms in search of potent substances with which to combat human ailments, and our practice has to a large extent been experimental. But since we have adopted the germ theory as a working basis many brilliant discoveries in treatment have been made, and we are on the threshold of making many more. The older physicians were fond of insisting that all treatment should be in imitation of nature, but few of them acted up to the extent of their tenets. This arose from a crude and imperfect pathology, and from a mistaken reverence for the dead hand of tradition. The tendency now is to follow more implicitly the lines that nature suggests, in fact to "conquer nature by obeying her, and to discard, so far as we can, the more foreign and obstructive methods of former days. For it is a recognised fact that in at least some diseases dependent on germs two distinct actions are going on in the body simultaneously. One is the elaboration of toxins producing the symptoms and sequelæ; the other the generation of substances antitodal to the former, and if the case be favourable, inhibiting further action. Acknowledging this principle, we are able by repeated injections of attenuated virus to render ourselves actually immune to the specific disease under experiment. Not only so, but by making use of the lower animals we can inject their altered serum into our patients, and at once stop the further progress of the disease and counteract the effects of toxins already elaborated. Statistics are not wanting to show what great benefits have accrued to the human race by the adoption of these methods, not only in the mitigation of epidemics, but in the saving of many individual lives.

What, however, appeals to the physician is the fact that we have discovered a new pathological process, the knowledge of which has placed our treatment on a scientific basis. For nothing is worthy of the name that does not follow nature in her own selected paths. The

more we study the germ theory in all its bearings the more do we find the necessity for observing carefully clinical symptoms, and for differentiating the various types of the same or allied diseases. The presence or absence of a particular germ in a case might mean our success or our failure in its treatment. Let us then appeal to the Government for a trained bacteriologist to pronounce on the nature of our germs, to supply us with antitoxins, and to assist us generally in our struggle with disease. That our germs in New Zealand vary somewhat from those in the mother country is almost proved by the types of disease we encounter here as compared with those at home. It is, therefore, only right that we have corresponding serums with which to treat them.

But it is not in germ diseases only that great strides are being made in the direction of treatment. The specific action of the different glands of the body is being diligently studied, and an extract of these glands exhibited in diseased conditions has given great, sometimes marvellous, results. The most successful hitherto has been the administration of thyroid extract in sporadic cretinism, that condition, perhaps, of humanity which excites most our commiseration and our sympathy. To transform a stunted, lethargic, expressionless individual, incapable of speech and devoid of reason, into an intelligent and active member of society is a result bordering truly on the miraculous. Analogy and experiment both warrant us in believing that in other glands we have therapeutic agents whose virtues will be clearly demonstrated in the near future. This, too, is a revival, or rather the springing of a seed planted in prehistoric times, but whose vegetation never advanced beyond the cotyledon. All great truths are slow of development. For ages they may lie dormant awaiting suitable conditions for growth, but they never altogether die. Hence the importance of history even in medical science.

Physiologists are at present attempting to isolate the active principles of these serums and extracts with a view to their production in the laboratory. But we can hardly expect that the manufactured article will be quite so effective as the natural product. It is at least probable that the effects of these substances are displayed only under certain relative conditions, or when associated with other actions concurrently taking place in the body. Oxidation of phosphorus in the laboratory is one thing, oxidation of phosphorus in the brain is another; and closer study of nature might lead the chemist to seek to produce the "raw material" instead of

attempting to isolate the most active principle. Is nature not essentially conservative, and have all her products not a definite utility in the economy? Malaria will sometimes yield to cinchona bark when quinine has proved inert, and many substances are active only when presented to the body in a nascent condition. But this idea is merely speculative. Time will show whether there be in it a grain of truth.

Many other instances of progress might be noted, but those already given will serve our purpose, and indicate the trend of Medicine at the present time. What, indeed, has been accomplished, proves the utility of studying biological science from its very foundation. Our theories to be legitimate must be founded on Nature's institutes, and if we desire to make further progress we must continually hark back to first principles. Knowledge is said to move in a circle. Let us rather say that it moves in an ascending spiral, from whose graduated heights we can study the past in a clearer light, and connect our present status with historic forms. Throughout it all must run the golden thread of truth. It is not the privilege of everyone to discover and lead on that golden thread, but we can all at least isolate our strand and bring it to light. As clinical physicians, we can observe facts and watch the operation of laws, leaving to master minds the weaving of these into principles, and so marking our ascending progress.

There is little romance in our work. Carried on to a large extent in obscurity and in silence, little encouragement is given to the faithful worker. But let us rest assured that good work carried on in a scientific spirit, however many the discouragements, will sooner or later reap its great reward. Not, indeed, always in the acknowledgment of personal merit, but in the building and solidifying of our own character. "Work," says Henry Drummond, "is an incarnation of the unseen. Integrity, thoroughness, honesty, accuracy, conscientiousness, faithfulness, patience — these unseen things which complete a man, are woven into him in work." Is this result alone not worth a life's effort? And yet the attainment of such completion is not to be sought in the application of our energies in one direction only. Prolonged study of a special subject contorts rather than rectifies our mental vision, just as the outside world varies in appearance according to the colour of the object we have last contemplated. It is a mistake to suppose that because we are physicians the whole of our powers should be devoted to the study of Medicine. The profession will not lose—nay,

will actually gain—by our straying into other fields of learning. Sir James Y. Simpson was an archæologist, Sir Andrew Clark a metaphysician, Dr. Arnot a natural philosopher, and yet all attained to eminence in their calling. Many have devoted their spare hours to literature, to poetry, and to art, and the world has been all the richer for these “*horæ subsecivæ*.” In this new country are many biological problems, the solution of which would render the discoverer famous for all time.

But after all, gentlemen, the true physician is not he whose motive in life is to climb the giddy ladder of fame, or to tread “with wayward feet the torrid desert of ambition,” but rather he who seeks to alleviate the sufferings of his fellow men, and to send vibrating into “the still sad music of humanity” a living chord of happiness and peace.

“Thou would’st be hero? Wait not then supinely
For fields of fine romance which no day brings;
The finest life lies oft in doing finely
A multitude of unromantic things.”

PRESIDENTIAL ADDRESS.

By J. A. WHEELER, M.B., B.S. LOND., M.R.C.S.
ENG., BRISBANE.

READ AT THE ELEVENTH ANNUAL MEETING OF
THE MEDICAL SOCIETY OF QUEENSLAND.

IN searching for a subject to form the basis of a valedictory address one is met by the difficulty of a wide range in the choice of a subject, and by the further difficulty that what one would wish to speak of has possibly been already treated in a more or less exhaustive manner by previous presidents of this society. This feeling, coupled with the fact that some of our professional brethren appear to have been seized with an ambition to take part in the making of laws for the State, have suggested to me that it would not be inopportune to touch cursorily on certain subjects, which, though not medical in their nature, are yet of great importance to us as a body of professional men. These are the laws of the colony which affect the status and duties of medical practitioners. While we have on the one hand people who claim that the Government should manage all the business of the country, and on the other hand others who say that the Government should only afford protection against force and fraud, leaving everything else to individual effort, it is somewhat difficult to formulate a definition of the function of Government, which shall form a golden mean between the two extremes. Yet I think that no one of whatever shade of

political opinion can cavil at the definition in general terms that a duty of the State is to make and carry out laws which shall tend to increase the well-being and efficiency of its component parts, these being the territory and the inhabitants. This being granted, let us consider briefly whether the laws affecting medical practitioners and their duties come up to the implied requirements of the definition, and, if not, in what way they may be made to do so.

No one will deny that the well-being and efficiency of a community depends to a very large extent on the good health of its individual members, and the Government, seeing this, has endeavoured, with more or less success, to safeguard the health of the community by means of certain laws, of which the first I shall consider is the Medical Act of 1867. In this Act the Government attempts to protect the community by defining who shall be declared competent to practice medicine and surgery, by the appointment of a board which examines the claims of would-be practitioners, and if it finds them satisfactory puts their names in a register, so that the public may know whom it considers competent to practice physic. The Act also specifies certain qualifications which the board is to accept as evidence of fitness, and provides penalties for any fraudulent attempt to be placed on the register. Unfortunately it stops here. Once a man gets his name on the register in proper form the board has no further control over him, and no matter how bad his future conduct may be there is no clause in the Act which empowers the board to remove his name from the register, or to punish him in any way. This defect should be remedied, for it is a preposterous thing that a board charged with the control of medical registration should not be endowed with disciplinary powers to be used as occasion arises. It is necessary, therefore, that the board should be given powers of punishment similar to those possessed by the General Medical Council of Great Britain. One other defect in the Act is that no provision is made to protect the public against those unscrupulous quacks who, from time to time, herald their advent into our larger towns by full-page advertisements in the local papers, making all sorts of contradictory claims for their nostrums, and backing up their statements by sham testimonials; nor is any protection afforded against those who live amongst us, and batten on the ignorance and fears of those who are suffering the penalty of indulgence in folly and vice. All these are profoundly ignorant of even the rudiments of medical knowledge, having blossomed immediately from their

original occupation of handicraftsman, menial servant, shop assistant, and so on, into full-blown professors of the healing art. I hold that people of this kind are just as much swindlers as the bogus company promoter or the confidence trick man, but they are much more dangerous to the community, for their victims are not only fleeced of their money, but are often seriously and sometimes irreparably damaged in health, and this statement I am sure that each one of us can vouch for from personal knowledge. Section 20 of the Act is supposed to deal with persons of this class, but it is worded in such a manner as to practically defeat its own object. For instance, it provides a penalty for anyone "who shall use a title or term which may be construed to mean that he is qualified to perform the duties of medical practitioner or chemist and druggist, and at the same time practice or compound and dispense medicines without being registered." You will see that for a quack to bring himself within reach of this section he has to do two things contemporaneously. He has to use a title or term, etc., and he has to practice or dispense. But he is apparently at perfect liberty to do either without the other, and as to titles he has the choice of medical botanist, herbalist, electric healer, Christian scientist, and so on, terms which the law does not consider may be construed to mean that the holder is qualified to practice medicine, although a large section of the general public does put that construction upon them.

There is, as far as I know, only one colony, Tasmania, in which these people are at all successfully dealt with. A section of the Tasmanian Act provides that "no person shall do or perform for fee or in expectation of a fee any of the acts following, that is to say, practice as a physician or apothecary, or prescribe to be taken or administer any medicine, or do or perform any surgical act or operation, unless such person shall have received from the President of the Court of Examiners a certificate that it has been proved to his satisfaction that such person is a doctor of medicine, or physician, surgeon, or apothecary licensed by some college or society" (which is specified) "or unless such person shall have obtained, after an examination publicly held before such Court of Examiners, letters testimonial to practice, under a penalty not exceeding £100 for each offence." You will note the great difference between the two clauses. Ours affords an easy loophole of evasion, while the Tasmanian offers an insuperable barrier to the quack of every kind. I am convinced that the substitution of this clause

in place of our own would be of incalculable advantage to the people of Queensland, both in health and pocket. An additional clause, imposing a fee for registration, would be of advantage, as it would provide the Board with a certain amount of income independently of whatever grant they may receive from the State.

THE CENTRAL BOARD OF HEALTH.

The Health Act of 1884 is another which requires consideration, and of this I shall only refer to those sections dealing with the Board of Health, and with infectious and epidemic diseases.

The Board of Health consists of not more than seven members, of whom at least three must be legally qualified medical practitioners, with the Home Secretary for the time being as their President. They are entrusted with the superintendence of the operations of the Act, which in its entirety is in force in all the large towns of the colony, having an aggregate population of about 200,000, and in part only over the whole colony, whose population is about 480,000. The corresponding Board in New South Wales has an annual grant of £20,000 to enable it to carry out the Act; while in Victoria Public Health has a separate department, with a Minister of State to itself. One would imagine that the Board of Health in Queensland would have a grant made them, at any rate, of like proportion to that of New South Wales. This would amount, roughly speaking, to about £7,000 per annum. You will, however, probably be surprised to learn that they only receive one-twentieth of this amount, or £350 per annum, this being at the rate of about 15s. per thousand of the population, a sum which is ridiculously inadequate to their requirements. Then, again, the powers possessed by the Board do not appear to be as satisfactory as they should be. Throughout the Act they appear to have only the power of advising and making recommendations to the Executive Council, which then, if it thinks fit, makes an order or regulation in terms of the recommendation. It has sometimes happened in the past that the recommendations of the Board have not always received the sanction of the Council, and the Board has not always received from its President that courteous consideration to which its position as a responsible public body entitles it. Speaking generally, it appears that in the past, at any rate, the health of the human portion of the State has received from the various Governments less consideration than of our flocks and herds. It is to be hoped, however, that this state of mind

will not long continue, but that the authorities will wake to the fact that the health of men and women is of at least as much value to the State as is that of sheep and cattle. Then we may expect that the Board of Health will receive a sufficient grant to enable them to carry out their work as thoroughly as they wish, and that they will be endowed with powers which will allow them to take direct action on their own initiative for the better working of the Act. Under such conditions the fiasco which attended the late inquiry into the prevalence and causes of lead poisoning could not have occurred. Section VI. of the Act deals with Infectious Diseases, and contains a number of excellent clauses relating to the duties of local authorities, which I fear are more honoured in the breach than in the observance. It also allows the Board of Health, still in the form of recommendation to the Executive Council, regulations for the treatment and prevention of infectious and epidemic diseases, but the weak point here is that the Board has to depend to a large extent for its knowledge on voluntary information. This is a matter for regret, and it would be decidedly to the advantage of the State if the notification of certain dangerous, infectious, or epidemic diseases to the central authority should be made compulsory. Their sources of information would then become automatic and continuous, and they would be in a better position for taking prompt and precautionary measures. Parenthetically I would like to suggest that the Government should facilitate the work of medical men in this respect by providing them with suitable printed forms, and allowing them to go free by post, even if they cannot see their way to granting a small fee for notifying, as is allowed by the English Act. It would also be well, considering that few of the dwelling-houses in the colony are suitably arranged to allow for efficient isolation, that properly built and permanent fever hospitals should be maintained in the larger centres; but as the cost of maintenance would, at any rate in part, devolve upon the respective local authorities, I fear that the chronically straitened financial condition of many of them would render this a matter of some difficulty.

VACCINATION.

One other Act I shall speak of which, unfortunately, does not appear in our Statute Book.

Hitherto our isolated position, and our system of quarantine has been successful in keeping smallpox from obtaining an entrance; but it would be too optimistic to expect that

these alone will be equally effective in the future, for with improvements in steam communication, and expansion of trade, our time distance from continuous sources of infection is becoming less, and with this our danger is becoming greater. I have no hesitation in saying that some day smallpox will elude our vigilance and gain a footing amongst us, and we must be prepared beforehand to meet it. Vaccination is for all practical purposes unknown amongst us, and the result of an outbreak of smallpox, say in Brisbane, would be almost too terrible for contemplation. The opponents of vaccination pin their faith on a fallacy and on an infinitesimal risk, and it is only right that the State should demand the sacrifice of prejudices based on such slender foundations, and should require that for the future welfare of the community vaccination under proper safeguards should become a universal custom.

9 1900 A CASE OF PUERPERAL PULMONARY THROMBOSIS FOLLOWING LA- BOUR.

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LAIDE.

MRS F., *æt.* 22, engaged me to attend her in her second confinement, which she expected about the middle of last November. I had previously attended her in her first labour about a year previously, when she was delivered of a five-months' child, and the confinement passed off without trouble, and was followed by a normal puerperium. As her husband was afflicted with congenital syphilis, and had, in addition, acquired the disease in the usual way, it is not surprising that the labour did not go on to full term. In her second confinement, however, she was more fortunate, and on the 17th November I was summoned, and found her in labour with a full-time child.

The patient was extremely sensitive to pain, and it was with great difficulty that I got her to wait until the os was fully dilated before I administered an anæsthetic and delivered a healthy male child with a normal presentation, and without any mishap beyond that of a slight laceration of the perineum, necessitating the insertion of two stitches. The placenta was expressed ten minutes after the child was born, and was followed by a smart hemorrhage for a few minutes, which immediately stopped on compression of the uterus, but not before she had lost over two pints of blood.

All went well until the sixth day, when on visiting I noticed that the lochia had a very unpleasant odour, though the patient stated she felt perfectly well, and her pulse and temperature were normal.

The next morning, in spite of a vaginal douche, the patient complained of several slight shivers. She had vomiting and abdominal pain and tenderness; the pulse was 120, and the tongue brown and drying. Intra-uterine douching with 1 in 1,000 perchloride was resorted to, but in the evening the temperature was 104°. The previous abdominal symptoms were unchanged, and in addition profuse diarrhoea had set in. Quinine was ordered, and a mixture of sulphuric acid and opium was given to check the diarrhoea, whilst the douche was again brought into requisition.

Next morning the symptoms were distinctly more favourable; the diarrhoea and vomiting had ceased, the abdomen was quite supple and free from pain, the tongue moist and with only a slight whitish fur upon it, but the pulse kept still very weak and rapid.

In the evening the temperature was quite normal, and the patient ate well, and generally expressed herself as feeling quite well, the tongue having become quite clean and moist, but the pulse remained unsatisfactory. The uterine douche was used for the last time.

On the following morning the patient's condition was still perfectly satisfactory but for the character of the pulse, but on making my evening visit I found her much worse, and was informed that she had taken a very bad turn in the afternoon, having had an attack of violent dyspnoea on sitting up, which, however, soon passed off when the recumbent position was resumed.

On examination I found the patient very pale, with rapid shallow breathing. She talked in a subdued strained voice as if the effort threw too much strain on the respiratory organs. She complained of a feeling as if something was lodged in her chest, pointing to a spot over the situation of the pulmonary artery, and of a terribly tumultuous heart. On auscultating the heart I found it as she described, very tumultuous and irregular, with a loud booming first sound, but I could hear no second sound in the pulmonary area at all; the pulse was uncountable. On turning her over to examine the lungs, she got such bad dyspnoea that I could only satisfy myself that there was free entry of air down to the bases when I had to desist. The temperature was normal, the tongue clean.

Unfortunately I did not recognise the true

significance of the symptoms, my mind being too much engrossed with the antecedent condition, and thinking it was only weakness subsequent to the puerperal fever, I gave a grave, though not grave enough, prognosis, and having ordered absolute rest, with the free administration of stimulants, I left the patient. Next day on calling I learnt to my surprise that the patient was dead. She had been talking quite cheerfully to the nurse, who, thinking she was not quite comfortable, sat her up in bed to rearrange the pillows, which act brought on a terrible attack of dyspnoea, and after a few gasps she fell back dead.

Such are the brief notes of the case, and the signs and symptoms seem to me to point rather to the rarer condition of pulmonary thrombosis than to pulmonary embolism, though the sudden and distressing termination of the illness threw the relatives into such a state as to preclude the possibility of verifying my diagnosis by a *post-mortem* examination.

Dr. Playfair is the writer who in English medical literature has paid most attention to this condition, and it is to the exhaustive chapter on this subject in his "Science and Practice of Midwifery" that I owe most of my knowledge on the subject. There he demonstrates clearly to my mind the possibility of its occurrence, and I think rightly attributes to it many of those terribly sudden deaths which occur during the puerperal state which were formerly classified under the delightfully vague term of Idiopathic Asphyxia.

As he points out, the conditions during the puerperium are especially those that would favour thrombosis in the vessels, viz. (1) a stagnated or arrested circulation, and (2) an alteration in the character of the blood leading to an increase in it of fibrinogenous constituents. Both of these predisposing causes are present. The stagnation of the blood is favoured by the recumbent position the woman assumes after labour, and by the weakness of the heart's action due to the exhaustion produced by the labour pains, and in the case in question this was additionally favoured by the fact that in order to avoid a second miscarriage the patient spent most of her time whilst carrying the child lying down, and further by the sharp attack of puerperal fever through which she passed still further exhausting an already exhausted heart. Secondly, as is well known, the blood during pregnancy contains a large excess of fibrin, especially in the latter months of gestation, which is considerably increased immediately after confinement by the waste materials thrown into the blood from the

involuting uterus, aggravated in my case again by the attack of fever. So, too, the loss of blood during labour, usually considerable in these cases, further increases the probability of thrombosis by the alteration it produces in the blood; and yet another cause which might have predisposed to the accident in the case of Mrs. F. is the fact that her husband had probably infected her with syphilis, though she showed no signs of it, thus rendering some change possible in the intima of her arteries.

Notwithstanding these strong predispositions towards thrombosis, there are some writers, notably Virchow and his followers, who argue that thrombosis of the pulmonary arteries is a mechanical and physiological impossibility, and its occurrence certainly must be difficult in such a large vessel, with the force of the heart beat so close to keep the blood moving, but it is equally difficult to see how a small embolus, such as any embolus must be when we only have the thrombosis in the small vessels of the uterus itself to supply it, can become arrested in a similar site, or if arrested how thrombosis could take place round the embolus; and to one or other of these two causes the fatal result must be attributed, though Dr. Gemmel, in the last *British Medical Journal*, cites a case in which sudden death occurred on the twelfth day after labour, and in which a *post-mortem* revealed thrombosis of the basilar artery, but in his case the symptoms pointed distinctly to some brain trouble, evidence of which is conspicuous by its absence in the cases of which I am writing.

The diagnosis then rests between thrombosis and embolism, and there seem to be two distinct classes of cases. In the first of these the symptoms arise early in the puerperium, generally before the fourteenth day, and often on the second or third before, or often coincident with those cases of peripheral venous thrombosis to which we would look as the origin of an embolus, and sometimes distinct signs of pulmonary obstruction show themselves, are not immediately fatal, and shortly afterwards peripheral thrombosis occurs, so it is difficult to see how embolism could occur in such a case without some preceding clot elsewhere to account for it. The second class of cases occurs later, generally after the nineteenth day, and are undoubted cases of embolism.

The symptoms and physical signs of the two conditions are essentially the same, and cannot be differentiated. In the large proportion of cases the onset is sudden, and the patient is dead before the medical attendant can be summoned. There is intense dyspnoea, the action of the heart is tumultuous and irregular, later

becoming exhausted. The patient may be very pale or deeply cyanosed; the intelligence is unimpaired, and death occurs suddenly from asphyxia. One would naturally expect that a cardiac murmur would be present, and in some cases this has been noted, though not in all. In my case the second sound in the pulmonary area was not heard at all, and in addition she complained of a symptom I have not seen noted before, viz., of a feeling as if something were lodged in the chest in the region of the pulmonary artery.

With regard to treatment, my error in diagnosis seems to have made but little difference, as the only thing to do is to keep the patient perfectly at rest, and assist the embarrassed heart by stimulants, which was done in this case. Ammonia has been recommended with the idea of helping the resolution of the clot, but beyond its stimulating effect I doubt if it is of much use. Some authors, who believe that all cases are due to embolism, recommend an entirely different mode of treatment. In the hope of displacing the embolus they recommend the administration of emetics. But to say the least of it the treatment is very hazardous. The prognosis is of course extremely bad, death almost always ensuing. But Playfair has quoted several cases in which, after exhibiting definite signs of the condition, and passing through several attacks of acute dyspnoea, an eventual recovery has been made. Of course in such cases no *post-mortem* has been made to verify the diagnosis, but it is well known that clots elsewhere in the vascular system can be absorbed, so that there is no reason why such a favourable termination should not occur in the pulmonary artery if sufficient blood can be brought to the lungs to ensure aëration of the blood, and with this object the patient should be rigidly kept in the recumbent position till long after all symptoms have disappeared.

It was in the prognosis that the consequences of my failing to diagnose the true state of things was most apparent, for the patient's friends could not understand how I could give a comparatively favourable prognosis at 8 p.m., and yet the patient should die at 1 a.m., and I think they had a considerable amount of right on their side, for if my mind had not been so engrossed by the antecedent condition my prognosis would have been much more grave.

My intention in reading this paper has not been to go deeply into the symptoms and pathology of the case, but rather to find out if you agree with my diagnosis, and to put on record a case of a rather rare and very fatal complication of labour, and I think I have already said quite enough for my purpose.

SEPTICÆMIA FROM A PORTION OF
RETAINED PLACENTA—OPERATION—RECOVERY.By R. S. BERRY, M.R.C.S., L.R.C.P. LOND.,
SOUTHPORT, Q.

On Sunday, September 24th, 1898, I was called to Tallebudgera, on the South Queensland border, to see Mrs. A—, who had been confined ten days previously. On arrival, I found the patient a finely-developed, well-nourished young woman, whose confinement (her third) was stated to have been a natural one, and to have given no cause for anxiety during the passage of the child or the expulsion of the placenta.

The patient was highly flushed, obviously very febrile, and complaining of pain in the head and lower part of the abdomen. She stated that she had been sore ever since delivery, that things were not "right" with her, but the person who was acting as midwife had assured her that everything would go well, as "all that was necessary had come away." The person who acted as midwife, an old woman from a neighbouring selection, assured me most positively that there had been no trouble with the placenta, that all had been passed naturally, and that she ascribed the patient's present condition to "chill."

On examination, per abdomen, the top of the uterus reached the umbilicus, and was tender to the touch. Per vaginam, (there was a deep rent of the perineum of which the patient had been told nothing, and which rendered the introduction of the whole hand easy, though somewhat painful), the os was found to be open enough to admit two fingers, and on feeling round the walls of the uterus a large mass of retained placenta was quickly felt firmly adherent to the wall, and on withdrawing the hand a quantity of foul discharge flowed from the stretched orifice of the uterus. I decided to attempt the removal of the placental mass at once, its presence and condition being so certainly the cause of the febrile condition of the patient. I had with me no instruments for curetting, but thought it possible that I might be able to strip the mass from the walls with the finger, and chloroform was therefore administered by Mr. E. R. Owen, the chemist at Southport, who had kindly accompanied me, at my request, to do so should it be necessary. The patient took the anæsthetic well, and immediately she was under its influence I passed two fingers into the uterus and attempted to separate the mass.

There was a sudden and profuse gush of blood which continued to escape in such quantity that it was necessary to desist, for the time, at once. A flushing tube was passed right to the fundus of the uterus, and the cavity syringed out with a strong solution of permanganate of potash, as hot as the hand could bear. This quickly controlled the hæmorrhage, which, to judge from the condition of the bed, the floor, and my own clothes, must have been very large in quantity, but the patient was so collapsed that any further proceeding at that time was out of the question. I therefore packed the whole cavity with long strips of soft linen soaked in perchloride of iron solution, injected two syringefuls of brandy subcutaneously, and put her back to bed between blankets and packed her well round with hot bottles. She shortly began to rally from the shock of the hæmorrhage, and six hours later I removed the lower strips of the plug to allow her to endeavour to pass her urine. This she was unable to do for herself, and so I passed a catheter, and drew off a fair quantity of water, of a typical febrile nature. Being obliged to attend elsewhere next morning I procured a proper nurse, and left the case in her hands, putting the patient upon a mixture of ergot and opium, and giving the nurse instructions to flush the cavity thoroughly night and morning with corrosive sublimate solution 1-3000, thinking it possible that the uterus might under such treatment get rid of the mass for itself. Two days later information came to me that the temperature was still varying between 102° and 104°, and I accordingly went out to her again. On arrival it was obvious that hæmorrhage or no hæmorrhage the uterus must be cleared out, for the patient was apparently almost moribund; temperature 104°; a pulse whose running beats rendered counting impossible, and delirium of a somewhat typhoid character. She had drifted from a sapræmic into a septicæmic condition, and no further placental shreds or masses had been passed, while a large quantity of foul discharge continued in spite of the morning and evening flushing. Per vaginam, I found the os much smaller, and barely, capable of admitting the point of the index finger. The summit of the uterus was almost two inches lower than on the first examination. I decided to operate at once, and chloroform having been again administered by Mr. E. R. Owen, I dilated the os rapidly with Hegar's dilators, and passing in my two fingers found the mass as firmly adherent as on the former occasion. A blunt curette fared no better than the fingers, and I therefore,

with a sharp-edged curette, scraped away all the rough surface I could feel, bringing out piecemeal a mass of placenta about the size of a large fist, fully a quarter, I should say, of a normal-sized placenta. Hemorrhage was controlled throughout by hot flushings with permanganate solution, and at the conclusion the cavity again packed with perchloride strips. The patient's condition at the close of the operation appeared quite desperate, and continued to be so until about six o'clock the next morning, when in response to repeated stimulation she began to rally, the pulse increased in force and diminished slightly in frequency, and she took slight notice of her surroundings. Temperature at 9 o'clock a.m., 101° . Plugs removed; no hæmorrhage following, and the cavity refushed with corrosive sublimate. I remained with her for the two following days, and the temperature continued between 101° and 103° , with a rigor occasionally which raised it to 105° , her condition being still very grave. It now became certain that she had passed into a truly septicæmic phase, for although the cause was removed from the uterine cavity, and the organ itself rapidly diminishing in size, and the offensive discharge entirely gone, the temperature remained unlowered, nay, if anything, higher than it had previously been. She had also obstinate vomiting, which rendered feeding very difficult, but she managed to retain very small quantities of brandy and milk, alternating with raw beef juice administered as often as possible. I continued the ergot, adding to it a little strychnine and digitalis, for her heart and general condition gave much anxiety, and at the end of the first week (from the operation) the temperature began to fall very slowly, jumping up occasionally to 103° to 104° but in general remaining at 100° to 101° . At the end of the second week a papular rash appeared covering the entire trunk and limbs. This rapidly became vesicular, and then pustular, and was, in short, a typical pyæmic rash. As the pustules matured the temperature rose again, averaging 102° for three or four days, but the assiduous attention of her nurse, who diligently punctured and cleared all the pustules she was able to, each night and morning, soon began to tell, and the temperature fell to varying between 99° and 100° . From this time forward she began to make good progress, sleep being obtained without the use of morphia subcutaneously, which had been a nightly necessity in the beginning, the appetite returning and with it the capability of retaining larger amounts of food. One incident in the recovering stage is worthy of

note. At one of my visits she complained that she was spitting a great deal, and that her mouth felt sore. On examining I found the entire gums very red and spongy-looking, and all the appearances of salivation. She was being irrigated still with corrosive sublimate, but I found that through a misapprehension as to the strength of the Burroughs & Wellcome Tabloids of that substance which were being used, she had been flushed with a solution of the strength of 1-500 for some days; hence the trouble. I knocked off the corrosive entirely, and substituted permanganate of potash, and the gums speedily regained their normal condition. The patient subsequently did well, and is now with the exception of a little œdema of the feet and legs, the result of her enfeebled circulation, almost herself again.

I have reported this case not because of any great peculiarity attending it, but because it sets forth, to my mind, the terrible danger that all parturient women encounter at the hands of the hopelessly ignorant, and in many cases uncleanly persons who practise as midwives in many parts of the country. That the person who acted in this case was all this I need not say, and as the operation proved she had no scruple in resorting to a lie in the attempt to shield her own deficiencies. I subsequently learned from the patient that the "after-birth was a long time coming, and that the nurse had to take it from her;" doubtless she pulled upon the cord, tore the attachment, and hurriedly got rid of the results of her malpractices, leaving behind that which might well have caused the death of the patient.

A CASE OF POISONING WITH THE SEEDS OF THE DATURA STRAMONIUM.

BY P. T. THANE, L.R.C.P. LOND., ETC.,
YASS, N.S.W.

At 2 a.m. on January 19th, 1899, a fair-haired, well-nourished girl, nearly five years old, was carried into my surgery. She was quite insensible, face flushed, breathing rapidly, about 60 to the minute but not stertorously. She spoke not, and made no sound. The pupils were only moderately dilated, and there was no conjunctival reflex. The skin was red, but not so much so as to attract attention. The temperature $106^{\circ}.6$; pulse about 150, full and bounding. The chest revealed nothing abnormal on examination, and the abdomen was rather full and hard. At frequent intervals, sometimes as often as every five minutes, there were tonic

spasms of the muscles of the limbs, the arms and legs being quite rigid and unable to be bent, and affecting the jaw muscles so that the mouth could not be opened.

The only history then obtainable was that, except for being at times troubled with small thread worms, she had been a very healthy child. She was seen by her mother at 4.30 p.m. on the 18th, and given a piece of bread and butter: she was quite well then. She went outside and played with some young children. Half-an-hour later she was picked up from the ground by a passing man, about forty yards from the house, in this insensible condition. The mother gave the child an emetic of salt and water, also some castor oil, both of which were swallowed and retained. She drove the child thirty-two miles into Yass. On the way in the child vomited some dark, almost black, fluid, which made the mother think that the child had eaten blackberries, which grew about the house.

The bowels did not act. The child was given several doses of vinum ipecac. with warm water, and two enemata. The former were retained, and the latter returned at once, bringing nothing with them.

At 5.30 a.m. $\frac{1}{16}$ th gr. of apomorphia was injected hypodermically, and within two minutes the child vomited about one-third of a pint of a dark odourless fluid, containing a few small dark seeds. At this time the pupils were more widely dilated, and she was still in the same comatose condition, but the face was less flushed. After this she ceased to swallow. The pulse became much weaker, the temperature was $104^{\circ}.4$, and within one hour was $102^{\circ}.4$.

The child gradually sank, the tonic muscular contractions continuing to nearly the end, and she died about 8.30 a.m. on the 19th. Towards the close the face got very dusky, and she evidently died asphyxiated.

Shortly before death she passed a small light-coloured fluid motion containing some more small seeds. These seeds examined with a glass exactly corresponded with the picture shown in "Taylor's Medical Jurisprudence," vol. i, p. 429, of the seeds of the *Datura Stramonium*.

At the *post-mortem* examination made by Dr. Doolan, it was found that all the organs were healthy; that the right side of the heart was distended, and the venous system engorged. The stomach contained $1\frac{1}{2}$ oz. of reddish-brown fluid, but showed no sign of irritant poison. It also contained a number of similar seeds, as also did the duodenum.

The evidence at the inquest elicited the facts that a weed, commonly called the castor-oil plant, grew near the child's home; that the man who picked up the child found afterwards, within a yard or two of the spot, an old pod of this plant, which was open and empty of seeds. One of the other young children stated that the deceased was playing with this pod in the afternoon.

This case is remarkable for two reasons:— Firstly, the rapidity of the onset of serious symptoms; the child was seen by its mother at 4.30 p.m., apparently perfectly well, and half-an-hour later she was carried in to her insensible and convulsed. Secondly, for some unusual symptoms presented by the child. Apparently there was no delirium at all. One of the other children said she felt sleepy and lay down, and they put a piece of bark for her to lie on. When seen first the pupils were not widely dilated, certainly not sufficiently to attract attention, but when seen later the dilatation was very marked. The face was certainly flushed at first, but not noticeably so considering the temperature.

The temperature appeared to be very high, and I can find no special reference to this point in the books at my disposal. The only reference I can find is that the bodily temperature may be raised. The skin was dry throughout.

When seen at first the difficulties of diagnosis were great.

This plant, which is, I believe, the *Datura Stramonium*, grows freely in this and other districts of the colony; and it is fortunate that there are not more cases of poisoning from eating the seeds than there appear to be. Looking through the *Australasian Medical Gazette* for the past sixteen years, I can find no record of any similar case.

Some three years ago there was a fatal case at Wagga, which was not diagnosed until after death. It was only two days after that a history of eating the seeds was obtainable. Although the child vomited, no seeds were found in the ejected matters. In this case there was a high temperature, from 103° to $104^{\circ}.6$. She was comatose all through, with tonic spasms, delirious at times, pupils dilated, and died in fifteen hours.

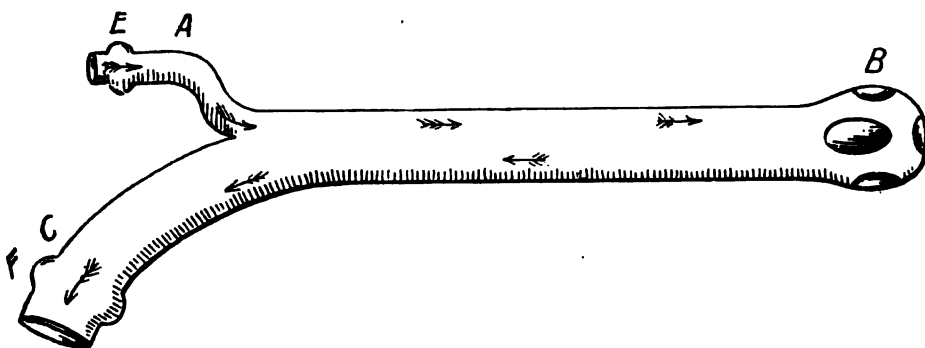
About that same time Dr. English here in Yass, with Dr. Doolan, attended a case, and the history was clear from the start. The symptoms were typical—delirium, dilated pupils, dry skin, lips, and tongue, fast pulse, but no temperature. He recovered within twenty-four hours after an emetic, followed by two hypodermic injections of morphia.

PERINEAL DRAINAGE.

By H. CRITCHLEY HINDER, M.B., CH.M., HON.
ASSISTANT-SURGEON PRINCE ALFRED HOSPITAL, SYDNEY.

In order to establish a healthy condition in a bladder in which cystitis has existed for a considerable length of time, it is universally recognised that efficient drainage is the main element in a rational form of treatment.

The perineal and the suprapubic are the rival routes. Perhaps because the suprapubic offers greater difficulties and requires a more complicated apparatus to carry out drainage in this direction, it has been chosen and stubbornly adhered to by some surgeons. To do them justice, however, it may be that, having removed a stone or a growth by the suprapubic method, they are averse to making another wound in the perineum.



In a public hospital, where the syphon apparatus of suprapubic drainage can be attended to by an intelligent wardman under the supervision of the resident surgeon, we would expect that the method would receive the best opportunity for sustaining its reputation. On enquiry, however, I find that frequently the tube becomes blocked, and as a consequence with a wound which is a fair size, the bladder fills up and overflows, while the patient curses the faulty gear, and unwillingly submits to an involuntary bath in his own urine.

I should think it is obvious then that to drain the bladder by tapping it at its lowest level should be the most thorough method, and if this can be managed in such a way that the patient can easily attend to his washing out himself, or with unskilled assistance, so much the better.

All this, then, a free drainage, a frequent

washing-out, and the greatest amount of personal comfort can be obtained in the method I am about to advocate.

The tube in the sketch is made of German silver. Instruments of this character made of glass are invariably broken. The shaft is a single tube; the two tubes A and C simply open into the shaft at the extremity, and there is no further division within the shaft.

The bulb B to a marked extent makes the tube self-retaining, and its five openings reduce the chances of blocking to a minimum.

To the smaller tube A a narrow rubber tube about a yard long is attached, and held in position by the shoulder E. This tube is kept closed by two clips; one close to its attachment to A prevents urine from passing out of A; the other, at the further extremity, keeps the lumen of the tube clear of possibilities of septic infection, and may lie along the side of the mattress and be held out of the way with a safety-pin.

The bend in this tube presents a surface which is less likely to irritate the pendant scrotum than an uplifted end.

To tube C, the exit tube, is attached a rubber tube, which is likewise retained by the shoulder F. This large rubber tube is interrupted by a piece of glass tubing about eighteen inches from its attachment in the ordinary way to allow of inspection of the tube contents. Too great dragging is prevented by suspending the tube by means of a tape and clove hitch to a safety-pin attached to the side of the mattress, while the lower extremity of the tube is loaded and sunk in a bowl of antiseptic fluid at the bedside.

For a short time, at all events, it is safer to attach tapes to the bifurcation and fasten them to a waist band, though later on this is hardly necessary.

In order to wash out the bladder, which may

be necessary every three or four hours, the patient removes the clips holding the smaller tube close to its extremities. The person in charge attaches a small funnel, and washes out with the fluid ordered. The patient adjusts the clips to the tube close to its attachment A, and likewise at the other open extremity, and stows it away.

Every other day the medical attendant or some other moderately competent individual may remove the tube, boil it, and return it without difficulty.

The whole arrangement is simple, and managed with the least possible tax upon the intelligence of the patient or attendants. My experience of it tells me that it is extremely unlikely to become blocked unless with large blood clots directly after operation, but this could occur at times even with a tube an inch wide.

Being made of metal, the tube can be easily sterilized by boiling, and will not break. It was made for me by Mr. Hentsch, of Sydney.

NOTES ON A CASE OF INTUSSUS- CEPTION IN A CHILD TEN MONTHS OLD.—CÆLIOTOMY.—RECOVERY.

By J. L. BEESTON, L.R.C.S.I., L.K.Q.C.P.I.,
NEWCASTLE, N.S.W.

M. B., very healthy female child, was in her usual state of good health up to 7 a.m. on the 26th July, 1897, when it awoke screaming violently, and apparently in great pain. About an hour afterwards it had a copious stool of blood, followed in a short time by another, in which there was some mucus.

I saw the child about two hours after the onset of the symptoms. A distinct tumour could be felt in the left hypochondrium, of the usual sausage shape. The abdomen was quite flaccid, but pressure on the tumour caused the child to cry. Nothing could be felt per rectum.

The child was in a state of collapse, and the extremities were cold.

I injected about six ounces of warm olive oil into the rectum, at the same time elevating the buttocks. This had no effect in reducing the size of tumour; in fact, the injection returned almost at once.

I therefore had the child admitted into hospital at 11.30 a.m., about four hours after the onset of the symptoms. It was placed under

chloroform, and the abdomen opened slightly to the left of the middle line between the umbilicus and the pubis. After the first incision the child ceased breathing, but after performing artificial respiration for a few minutes it recovered, and the remainder of the operation was proceeded with almost without any anæsthetic. On opening the peritoneum, about four ounces of a viscid yellow-coloured fluid escaped, causing me to think that the bowel had ruptured and that this was the oil. It had no smell, so I proceeded to search for the tumour, which was found without much difficulty. I brought the whole mass out of the abdomen, and laid it on a towel wrung out of hot boracic solution. The point of ingress having been found, I applied slight traction on it, and gently squeezed the other end of the tumour. It gradually became reduced, and at last all was free. The ileum was invaginated into the colon about twelve inches. One point in the intestine seemed of doubtful vitality, and had a slight smell. However, as resection was out of the question, and as anastomosis did not seem to offer a much better chance, I replaced the whole, keeping the doubtful portion just under the wound in case a fæcal fistula formed.

The abdominal wound was closed in the usual manner, the peritoneum being stitched with a continuous suture of catgut, and the skin and muscle united by interrupted silkworm gut sutures. By the time the last suture was tied the child began to look around, and in a less condition of shock than prior to the operation.

At 2 o'clock the temperature was 103°, but during the night it dropped to normal, after a dark bloody-looking stool had been passed.

27th July.—Passed another stool with dark blood. Child looking well and comfortable.

The next day a teaspoonful of castor-oil was given, which brought away a good healthy-looking motion.

The subsequent history of the case is uneventful. With the exception of a stitch abscess, there was apparently very little the matter beyond the slight fretfulness consequent on being kept in bed. She remained in hospital about three weeks, and has since remained in perfect health.

The slight amount of trouble given in the performance of the operation was undoubtedly due to the fact that no delay took place, but as soon as the diagnosis was made the operation was promptly performed.

CASE OF MALIGNANT ŒDEMA. AM- PUTATION AT THE THIGH— RECOVERY.

BY J. MALCOLM MASON, M.D., F.C.S., D.P.H.
CAMBRIDGE, OTAKI, N.Z.

READ AT THE ANNUAL MEETING OF THE NEW
ZEALAND BRANCH OF THE BRITISH MEDICAL
ASSOCIATION.

THE microbic cause of malignant œdema, which has been shown by various bacteriologists to be identical with that of Pasteur's "microbe septique," while almost always present in garden soil dust and the upper layers of the earth, is, fortunately for humankind, rarely introduced into the human animal.

Those of you who have seen it attack a gunshot wound or a compound fracture will never forget its lightning-like march, and the awful prostration which follows its inception into the blood.

The following case illustrates most clearly those two features of the disease:—

A healthy boy, aged 11 years, fell off a truck at a brickyard; the wheel of the waggon passed over his right leg in such a way that all the soft parts were peeled off the tibia from the ankle to the knee. No one else was present when the accident occurred, and the fresh cut tissues seemed to have been rubbed along the surface of the ground. The boy had to be carried some three miles from the scene of the accident to my house. He was almost unconscious from loss of blood and shock when I saw him. The wound was carefully washed with 1 in 2,000 perchloride solution, and the parts brought together by wire sutures. Constant irrigation was applied, but within twenty hours the foot showed signs of gangrene, which spread up the leg most rapidly.

Dr. Anson saw the case with me some hours later, and by that time the skin was quite brown and emphysematous; crackling could be felt as high up as the eighth rib on the right side. The boy was quite collapsed and unconscious. The limb was much distended with gas, and as the stitches were cut through the characteristic smell of malignant œdema was very apparent. An hour was allowed to go past to see if any amelioration of the symptoms would take place; then amputation was decided upon, not with much hope of saving his life, but rather that he should not die without something being done. There being a small patch of uncoloured skin on the inner aspect of the thigh, I at first thought of doing an amputation at the hip, but as there would not have been sufficient sound tissue to cover the wound we

decided simply to cut away the dead part, and I amputated about two inches above the knee.

As indicating the condition of the parts, I may say that there was not the slightest necessity to tie any of the blood vessels. The boy passed a night, and on two occasions seemed about to die, but the free exhibition of brandy by the bowel pulled him through. Within ten hours the emphysema disappeared from the chest and abdomen, the low muttering delirium ceased, and five days later, with the help of Dr. Anson, I did amputation two inches higher up in order to get a good flap. There was very free bleeding at the second operation, but the boy made an uninterrupted recovery, with the exception that the ligature on the femoral cut its way through the diseased vessel, and I had to tie it higher up. He is quite well and strong now, and has an excellent stump.

The operations require no further comment; they were perfectly simple; but in a similar case I would advise that a big vessel like the femoral should be tied high up quite clear of the diseased tissue. One other lesson which such a case teaches is never to despair. Where the indications are as grave as they were in this case an operation can only hasten death, while it may save the patient. In concluding this brief account of a very rare accident, let me say a few words on the bacteriological aspect of the case. In the power for evil which the bacillus of malignant œdema shows when transferred from its normal habitat to that of the blood of an animal, we have a perfect illustration of how easy it is for an organism to be at one time non-pathogenic, and at another pathogenic. In the soil, its proper home, it, like many other organisms, acts a beneficent part by destroying dead matter, away from home in a foreign land, so to speak, it plays the part of a very demon. When one bears in mind the ease with which a guinea-pig can be killed by simply injecting a solution of garden soil under the skin, the wonder is not that malignant œdema is rare, but that it is not one of the commonest diseases. Several cultures were made by sinking pieces of tissue into nutrient media. Portions of these I injected into two guinea-pigs.

You will not, I am sure, take it amiss if I review shortly the characteristics of this bacillus. It is a comparatively large individual, slightly thinner than the anthrax bacillus, which it very much resembles in appearance. It belongs to that division of the germs which Pasteur named "anaërobic;" that is they thrive only in the absence of oxygen. Therein lies one of the great difficulties of culti-

vating it in nutrient media, because unless we have a laboratory where pure hydrogen can be constantly poured over the colony the enemy under discussion absolutely refuses to show his paces, so to speak.

I managed to raise a weak colony by sinking pieces of tissue deep in the nutrient media, to which I added some glucose to act as an absorber of organisms.

I am indebted to Mr. Gilruth, the able chief veterinary surgeon, for a suggestion which assuredly I shall try when next I wish to cultivate an anaërobic micro-organism. His plan consists in covering the surface of the media after inoculation with a layer of sterilized paraffin, which acts as a perfect isolator from the atmosphere, thereby converting your tube into an almost oxygenless media.

One of the chief points of difference between the bacillus of malignant œdema and that of anthrax is that while both are readily stained with any of the ordinary basic dyes, the malignant œdema bacillus loses it, while the anthrax bacillus retains the stain after being treated by Gram's method.

Under certain conditions it forms spores which have a peculiar appearance; they appear as oval bodies in the centre of the bacillus. Now in tetanus, as you may remember, a similar spore often is present but at the end of the organism; hence the name "drumstick."

A small portion of the colony grown in glucose was injected into two guinea-pigs, with the result that death took place in about forty-eight hours, with all the symptoms of malignant œdema. A solution was then made of the soil from the scene of the accident. A portion of this was injected over the inside of the thigh of another guinea-pig. This again caused death in about forty-four hours, with all the usual *post-mortem* signs of malignant œdema.

The fact that we had to deal with an organism which can only thrive in the absence of oxygen accounts fully for the great and immediate benefit which resulted from the removal of the dead part of the limb, and the consequent exposure of the stump to pure air containing oxygen.

Reasoning back, I should advise the free use of hydrogen peroxide in the treatment of such a case, because by the liberation of free oxygen you would be offering the bacillus of malignant œdema the very set of conditions under which it cannot make headway. I have here a number of slides which I hope will supply the many deficiencies of this brief and rapid sketch of a fortunately very rare disease.

TWO CASES CONTRASTING EFFUSION INTO THE MIDDLE EAR AND INTO THE LABYRINTH.

By J. LOCKHART GIBSON, M.D., OF BRISBANE.

READ BEFORE THE MEDICAL SOCIETY OF QUEENSLAND.

THE essential features of the two cases I propose reading notes of this evening, can, I think, be made of interest to those whose knowledge of ear diseases is only of a general nature. I have, in fact, been induced to put the notes together by a desire to point out to those colleagues engaged in general work, the great importance of early and accurate diagnosis in cases of extreme and sudden deafness. I even entertain a hope that the paper may help some, who, with only a limited knowledge of ear diseases, are forced by the distance of their practices from large centres to rely entirely on their own resources in the treatment of perhaps similar cases. The patients, both young men, consulted me within a few days of each other, and the points of similarity and of dissimilarity are striking. Entirely different lines of treatment yielded practically identical and satisfactory results.

Z. Y., aged 19 years, gave on November 4th the following history:—One week previously had been swimming. That evening pain commenced in both ears. It increased on the two following days, then decreased somewhat, but there is still pain. There has been no discharge. Very deaf.

Examination.—Hears loud speech at two yards. Hears a watch, which should be heard at four yards, with right ear at seven inches, with left ear at eight inches.

Tuning-fork heard on the left side from vertex. Much better by left mastoid than by air conduction, better by right mastoid than by air conduction.

Left membrana tympani thick, opaque and an appearance as of fluid in the lower third of the tympanic cavity. Right membrana tympani also thick and opaque, and suggestive of serous exudation into the middle ear.

Examination of upper respiratory passages disclosed a comparatively healthy state of things, with the exception of a marked deflection of the nasal septum into the left nostril. By this, nasal breathing was rendered imperfect.

Politization yielded a moist sound to otoscopic auscultation, and improved the hearing for watch to right ear: fourteen inches, left ear: twenty-eight inches.

Diagnosis.—Serous exudation into each

middle ear. "Middle ear catarrh." Prognosis: hopeful, if treated.

On the following day the hearing had practically retained the improvement gained by Politzerisation, and further Politzerisation added to this. Two days later the hearing was—right ear thirty-one inches, left ear twenty-four inches. Politzerisation every third day brought it to normal in each ear on November 24th, or twenty days after his first visit. It has remained there.

X. W., aged 25 years, consulted me on 7th November.

History. Ears have troubled for two weeks; the left ear, perhaps, for three weeks. "Prior to that heard as well as anybody." Never had ear trouble before. No pain, but constant singing and buzzing noises in his ears. Has suffered for a month past from headaches and giddiness when walking, and from a kind of light-headedness. These symptoms appeared before deafness, which is now extreme.

Examination.—Necessary to speak loudly to him at four feet. Watch (four-yard watch) heard—right ear one inch, left ear very close contact with auricle.

Tuning-fork.—Heard on left side from vertex; *heard twenty seconds longer by air conduction than by the mastoid on either side.*

Mouth.—A scar-like mucous patch on left border of tongue anteriorly and below. Pharynx and naso-pharynx irritable, and with somewhat thickened mucosæ. No other mucous patches. No obstruction to speak of in nares or naso-pharynx.

Membrana tympani of each a little thickened and opaque and a little indrawn, but no indication of recent exudation into the middle ears.

Skin.—An indurated, raised, scaly, shilling-sized red patch on the right side of neck below mastoid. A scaly raised papule on the left wrist. Scattered maculæ and a very few papules over the body. Cervical glands slightly enlarged.

To direct question: A chancre twelve months or more ago. Treated by chemist with pills and medicine for eight months.

Diagnosis.—Exudation into internal ears, result of late secondary syphilis, or, more correctly, of return of secondary syphilis ("recidiv").

Prognosis.—Guarded to hopeful. Active constitutional treatment the only hope of obtaining improvement.

Treatment.—To go to bed for seven days. To rub 45 grains of blue ointment into his skin daily for six days. To keep on the same pyjamas, and not to bathe. To have a hot bath on the evening of the seventh day, and

see me on the eighth. On this last day he expressed himself as hearing better. Right ear, watch: two and a-half inches; left ear: contact without pressing. Mucous patch on tongue had disappeared. Indurated area and papules on skin had lost their induration. Owing to a necessity for leaving Brisbane, he was able to use only four further inunctions, and he then continued hydrarg. internally. I saw him last, a month after his first visit, when he heard my watch—right ear: fifteen inches, left ear: four inches. As improvement had been steady, it has probably advanced considerably since. He was obliged to leave for his home in another colony, but was to place himself under good supervision. Even if no further improvement occurred, he had regained useful hearing.

Remarks.—For diagnosis between disease of the middle and of the internal ear, the tuning-fork gives us the most important information. For this purpose a tuning-fork of low tone and fairly loud will be found most useful. Any case of deafness as extreme as either of the above cases will hear the tuning-fork better by bone conduction than by air conduction if the affection be one of middle ear disease, which has not implicated the labyrinth; and *vice versa* if it be a case of internal ear disease reducing the hearing to the above extent the fork is heard, provided the middle ear is not implicated and was previously healthy, better by air conduction than by bone conduction. Where the deafness is of a slighter degree, the tuning-fork does not always give such positive evidence as in the two cases dealt with.

The most feasible explanation of the tuning-fork test is that a normal middle ear conducts sounds better to the labyrinth than do the bones of the head, and a diseased internal ear, therefore, recognises sounds better when conveyed to it by the normal channel. A diseased middle ear conducts sounds badly to the labyrinth, and for the same reason it conducts badly vibrations from the bony labyrinth outwards to the external meatus. A tuning-fork, therefore, when placed on the mastoid in a case of middle ear exudation has its vibrations carried to the labyrinth as in the case of a natural ear, but whereas in the normal ear these vibrations spread themselves quickly towards the middle ear, and are thence conducted outwards; when the middle ear is diseased they are, so to speak, pent up in or thrown back upon the internal ear, and the sound sensation is thereby intensified, on account of the absence of the natural safety valve. Obstruction of the external meatus by wax or by the finger gives rise to similar results with the tuning-fork to obstructions in the middle ear itself.

The case of middle ear disease described, is one of simple catarrhal exudation, a condition which may, and at times does, improve without treatment, but it is never safe to leave a case untreated, as there is always danger of adhesions forming and of consequent fixation of a portion of the ossicular chain. Some of the cases under treatment run a steady course towards recovery, and others relapse again and again, sometimes for weeks, but always in my experience to end with a good result, with patience and perseverance. Occasionally, however, one fails to obtain more than very partial improvement prior to removing obstructions in the nose or naso-pharynx. Obstructions which had apparently done little or no harm previous to the attack, but which handicapped the middle ears and eustachian tubes so much during the attack as to prevent permanent improvement. They had also been a cause predisposing to the middle ear attack.

Regarding the case of labyrinthine disease, the prognosis in a case of syphilis could generally be favourable if treatment were begun at once, but when exudation has once occurred into nerve tissue, and more particularly if it has occurred into the delicate end-organ of the auditory nerve, it is impossible to say that recovery will occur, however active the treatment. Labyrinthine mischief of the degree which obtained in this case, and due to any cause other than syphilis, would have called for an absolutely hopeless prognosis. Perhaps I should, however, exclude some vegetable and mineral poisons and the poisons of some of the specific fevers when making this last statement.

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A CASE OF PYLORECTOMY.

BY GEORGE WILSON, M.B., C.M., PALMERSTON
NORTH (PROV. WELLINGTON), N.Z.

READ AT THE ANNUAL MEETING OF THE NEW
ZEALAND BRANCH OF THE BRITISH MEDICAL
ASSOCIATION.

THE following record of a surgical failure possesses sufficient features of interest to make it worth recording :—

Mrs. S., aged 45, first consulted me upon December 9th, 1898, complaining of constant vomiting, a dull pain in the region of the heart, and “a lump in the stomach that moves about.” She told me that the heart pain had troubled her off and on for years, and that a doctor had told her some years ago that she had heart disease. That she had had occasional “bilious attacks” for years back, but that they had become more frequent about three months ago, and that the vomiting had become greatly aggravated since she had done a heavy day's work, lifting sacks of potatoes about ten days previously, and that within the past three days it had become so severe that she could not now take even a glass of water without vomiting it immediately. She added that during the last three days the vomited matter was sometimes streaked with blood, and that for some time past it had been often dark-coloured. She noticed the “lump” for the first time after lifting the sacks of potatoes.

The only point of importance in the family history was that one brother died at about the age of 43 of cancer of the stomach. The husband told me that this was verified by *post-mortem* examination.

Examination.—Patient was much emaciated and cathectic, with a dry parchment-like skin. The respiratory system was normal.

Alimentary System.—Tongue dry, brown, and fissured. On inspection of the abdomen a tumour was readily visible through the thin flaccid abdominal wall lying almost transversely from the middle of the right hypogastric to well across the umbilical regions. To touch, this tumour felt hard, but not nodular. It was so freely movable that it could be pushed up under the costal margin on the left side, and downwards to about the position of the right kidney. In shape it felt somewhat like a kidney slightly enlarged, with its greater curvature turned downwards. It did not move with the liver during respiration. The liver was normal in size, and no nodules could be detected. The left kidney was readily palpable, but I failed to palpate the right kidney.

Circulatory System.—The apex beat was diffuse, and all the usual signs of mitral incompetency were present.

Urinary System.—I had only a small quantity of urine to examine, but it failed to show blood, albumin, or sugar.

The first feature of clinical interest in this case was the diagnosis. Malignant disease of the stomach of course first occurred to my mind, but I was inclined to put this aside for the following reasons: (1) The very well defined margins of the growth. (2) Its extreme mobility. (3) The statement that the patient was always very thin. (I had never before seen her.) (4) The wasting and the hæmatemesis in the minor degree described by the patient might have been due to the cardiac condition. (5) The history of apparently sudden appearance of the tumour, and aggravation of vomiting immediately after lifting heavy weights. The other possibilities suggesting themselves to me were a floating right kidney with an unusually long mesonephron, and a growth simple or malignant of the omentum or transverse colon. My inability to detect the right kidney, the shape and mobility of the tumour, and the sudden onset of signs and symptoms after exertion, pointed rather to displaced kidney; while the hardness and absence of history of renal colic, and the rarity of a long mesonephron, were against it. I confess I was in doubt as to the nature of the condition until I opened the abdomen.

The patient was admitted to hospital on December 10th. She was fed partly with peptonized foods by the mouth, but mainly with peptonoid suppositories and peptonized and pancreatized foods by the bowel. In addition, she had a simple mixture of nepoche, acid hydrocyan. dil. and liq. bismuth, and \bar{z} ii. of brandy in the twenty-four hours. The vomiting improved for the first twenty-four hours, but became more frequent than ever later on, and the stomach would retain nothing. As the bowel had not moved for some days, enemata were administered, but without result, and upon December 14th I proceeded to explore the abdomen. I was assisted by Drs. Macintire and Mason. I opened the abdomen in the middle line over the tumour with an incision about three inches long, extending downwards to a short distance below the umbilicus, and exposed a dense, apparently malignant, tumour occupying the pylorus and about one quarter of the pyloric end of the stomach. The line of demarcation between healthy and diseased tissue was strikingly distinct on all sides, and no secondary deposits could be found in the

neighbourhood. On Dr. Mason's suggestion I proceeded to remove the diseased portion. Enterectomy clamps were placed on the duodenum beyond the disease, and the bowel divided between them upon a piece of lint to catch any extravasation. The transverse mesocolon was then tied with overlapping stitches and divided, and I may here remark that it would have been much better to include it all in one ligature, as some time would have been thereby saved. The stomach was then grasped with ovariectomy forceps beyond the diseased area, and the male portion of a Murphy's button having been fixed in the duodenal opening in the usual way, and a pair of catch forceps left grasping its free edge in case of its slipping into the bowel, the stomach was turned over to the left so that the diseased portion was well beyond the edge of the abdominal wound, and this was then removed close to the clamps. The turning-out of the stomach was to avoid extravasation into the abdomen. About three-fifths of the wound of the stomach was now closed, the peritoneal edges being inverted, and the pucker at the lower angle being covered with a piece of peritoneum. At this point in the operation the patient's pulse became very bad, probably as a result of traction upon the stomach; I now fixed the female portion of the Murphy's button in the remaining part of the wound, and a most regrettable delay was occasioned by the suture breaking twice. At last, the patient's condition having become so bad that it seemed likely that she would die on the table, I introduced coarser silk in about four stitches, fixed in the button, and finished the operation as quickly as I could, leaving in a gauze drain.

For an hour after operation patient was extremely collapsed, but under ether and strychnine hypodermic injections, frequent enemata of brandy and a warm saline injection, she rallied; and, although still suffering profoundly from shock, showed distinct improvement four hours after operation. As she was restless and had some pain, $\frac{1}{4}$ th grain of morphia and $\frac{1}{160}$ th grain atropine were administered hypodermically twice during the following six hours. Enemata of water were given during the night to relieve thirst, and nutrient enemata of peptonized and pancreatized beef tea and egg, with brandy, were given every two hours, and were well borne, and occasionally a teaspoonful of water was administered by the mouth.

Of the after progress of the case there is not much to say. The treatment consisted in fighting the tendency to collapse, and twenty-four hours after operation the patient had

considerably improved. On the evening of the 15th, however, the heart began to fail, and thrice the pulse could not be felt at the wrist. She apparently rallied under stimulants and digitalin, $\frac{1}{100}$ th grain hypodermically every two hours. She had a fairly good night, and at 11.30 on the 16th her condition was more hopeful. In the afternoon she vomited two or three times. On the 17th the pulse gradually got very feeble, and during the afternoon the bowel failed to retain enemata. There were no signs of peritonitis, and the gauze drain showed no leakage. During the night she gradually sank, respiration became sighing, and at about 7 a.m. on the 18th she became unconscious, and at 8.30 she died. I regret to say that I could not obtain permission to make a *post-mortem* examination.

Notes.—If the operation of pylorotomy is ever justifiable, I think that I was right in doing it in this case. The remarkable limitation of the disease, the extreme mobility of the growth, the thinness and laxity of the abdominal walls, and the certainty of speedy death without operation, all justified operation. The only contra indication was the condition of the heart, and I think it was very evident that death was due to failure of the heart. Incompetent as it was, and weakened in addition by starvation before operation, it was unable to stand the shock of the operation.

During operation I was hampered by not having any satisfactory clamps. The ordinary enterectomy clamps are much too small to control the stomach, and I would strongly urge any surgeon who intends doing a pylorotomy to provide himself first with clamps long enough to grasp the stomach in its widest part. Another practical point is that it would be better to put on the clamps at least $\frac{3}{4}$ inch, and if possible more beyond the disease, so as to have plenty of peritoneal surface to invest. This would save a good deal of time in stitching up the wound, and would be a great safeguard against leakage. It would do no harm to invert $\frac{3}{4}$ inch of stomach wall. The third practical point I would call attention to is the tendency to breakage of the fine silk in drawing up the "purse string" round the Murphy's button. I believe other surgeons have experienced this accident besides myself. Had I had any idea of performing pylorotomy when I started to explore the abdomen I would no doubt have carefully tested the fine silk before operating, and much could be done to prevent this accident by examining the silk beforehand. It should be noted, moreover, that the greatest strain will be put upon the silk in closing the

larger, i.e., the gastric opening, and I see no reason why an ordinary surgical needle with medium silk should not be used in this part of the operation. The coarser silk will purse the edges of the wound as well, if not better than, fine silk; it is easier to handle, fewer stitches will be necessary; there is no more tendency to cut; undue traction will be avoided by the fact that one can recognise at once when the silk is "home" in the groove of the female portion of the button; and the groove itself will prevent any tendency to leakage through the larger stitch holes. Lastly, by using the coarser silk delay at the critical time of the operation will be avoided.

In concluding, I would warn operators not to pull upon the stomach when operating. It is somewhat difficult to avoid this, and my patient very nearly died upon the operating table as a result, I believe, of my having unconsciously used traction on the stomach.

INTRA-PERITONEAL ACCUMULATION OF PUS IN A MALE SUBJECT, TREATED BY INCISION THROUGH THE ISCHIO-RECTAL FOSSA.

BY J. B. NASH, M.D., WALLSEND, N.S.W.

A. H., *æt.* 23 years, labourer.

He first came under observation in the beginning of November, 1898; then he had signs and symptoms that pointed to bowel obstruction in the near future, yet the picture was not complete enough to justify one in making this diagnosis. The means used to get the bowels to act were successful. When the stage of urgency had passed, and the case developed, his condition was as follows: his face pinched and anxious; he was getting thinner and worn out; his pulse was constantly over 100 per minute; and the temperature varying to 102° F. He had some fulness at the lower part of the belly; here the wall was rigid, and he complained of pain, which pressure aggravated. These phenomena, plus an examination per rectum, raised the question of an accumulation of pus in relation to the pelvis.

Examination of Abdomen.—A tendency to distension was noticeable above the symphysis pubis; a distinct resistance to pressure was perceptible at the inner half of the right iliac region, the right half of the hypogastric region, and the middle third of the umbilical region. This part was tender to superficial and deep pressure. The percussion note was resonant over the whole abdomen, with an altered

quality in the area just described. There was no tendency, in any part, to indicate, that the material was endeavouring to find a way to the surface. Per rectum the ampulla, and from one and a-half to two inches above the prostate, of the rectum, were dilated, and its wall smooth; above this it was collapsed and rugose. To the front, and at the sides, of the dilated part, the feeling given to the tip of the finger, was that of a fluid accumulation, which could be pressed into but not pushed away. The upper margin of this could not be reached, nor was there to be felt any point, where the contained material could be suspected to be making a way into the rectum. It seemed to be definitely limited by some tissue. With a temperature chart showing constant variations from 98° to 100° F., and a pulse constantly over 100 per minute, the suspicion entertained became, in a fortnight, well founded, and fully justified a diagnosis of an accumulation of pus.

Then where was it situated? Had its origin been in any extra-peritoneal tissue, and more particularly in this patient, in the cellular layer immediately in relation to this membrane, it would, if on a high plane in the pelvis, have burrowed beneath the serous lining towards the groin; while, if at a lower plane and near the bowel, the pus would be felt to be pushing some part of the lumen of this tube inwards, as is so commonly the case in accumulations anatomically comparable in the female.

It followed that the case was an intra-peritoneal accumulation of pus enclosed by "an abscess sac." This, shutting off the suppuration, represented a successful effort of nature to protect the rest of the peritoneal surface from direct contamination, and, by limiting the area for absorption, to diminish the danger to the whole organism from too rapid absorption of poisonous materials, which might lead to an acute general intoxication and, it may be, rapidly following death. It is an example of the battle, between the cells of the body and their ever present enemies the bacteria and cocci with produced toxins, in which the protoplasmic elements of the corpus humanum succeeded in keeping them at bay, until assistance arrived, in the form of the surgeon with his aseptic and antiseptic allies.

How should this pus be evacuated, its sac satisfactorily drained, and kept properly washed out?

Owing to its situation and relations, it would hardly be possible to excise *in toto* the abscess sac and its contents. Three routes lay open before one. The first, through or near the mid-line of the anterior abdominal wall; here, when the peritoneum was opened, some coils of bowel

would require to be separated from one another and from the front boundary of the accumulation, this might possibly undo what nature perfectly performed for some weeks, and allow pus to get into the general peritoneal cavity. To drain for a period would be necessary, and to do so uphill is a violation of a first surgical principle, besides being an obstacle to the falling in and separating of the coagulated lymph wall. The second, by an incision in the right groin, to get beneath the peritoneal reflection, reach a place below the pathological area on a plane posterior to the coils of intestine, here to open the serous membrane, and evacuate the pus. The objections as to drainage persist, and the pus, having to pass through a space with much loose cellular tissue in it, might not be entirely devoid of danger, notwithstanding the immunity that may have been acquired during the period of his illness. A slow convalescence would be nearly sure to follow either of these procedures. The third route, to reach the peritoneum from the ischio-rectal fossa, is not so well explored a road, yet the anatomical objections to it are not important. There is ample room for a free incision between the anal aperture, and the ischial tuberosity laterally, and from the mid-point of the perineum to the tip of the coccyx antero-posteriorly. The proximity to the anal canal may be a disadvantage, in a case where there has been no preceding toxin infection, but, in this case, the individual had been in all probability immunised against the bacterium coli, and with due care in treatment, there should be only ordinary risk as to other infecting organisms. The peritoneum when reached can be freely incised. The lowest point will be drained, and the specific gravity of the pus, with the positive intra-abdominal pressure, will effectually prevent any accumulations. There will be little tendency for matter to lodge anywhere along the track, owing to its dependent position, the facility for the drainage tube action, and the ease with which it can be freely irrigated. The blood vessels here to be dealt with are the inferior hæmorrhoidal branches of the pudic artery with the accompanying veins, while above the levator ani, and in relation to the rectum, are the divisions of the superior hæmorrhoidal arteries before they pierce the rectal wall. The plexus of hæmorrhoidal veins lie on the lateral aspect of the second part of the rectum.

Operation.—Ordinary preliminary details having been attended to, an incision was begun just behind the mid-point of the perineum, it was carried in a line convex outwards across the middle of the left ischio-rectal fossa, and it terminated a little in front of the tip of the

coccyx. The knife was at once passed through all the tissues to the under surface of the levator ani, and the anterior half of this muscle, with its investing fascia, was next divided. The left index finger was passed into the rectum, and, with it as a guide, a needle on a syringe was directed along the wound till it reached the peritoneal reflection, it was pushed onwards inside the left posterior false ligament of the bladder, when the point was free the piston was drawn, and pus flowed into the glass tube. The needle was left *in situ*, and a long pair of pressure forceps were passed alongside it into the pus; by separating the blades a free aperture was made, and along this there flowed away about two pints of thin creamy pus. The peritoneal edges were grasped laterally with forceps, and the incision enlarged to about two inches. Free irrigation, with warm boracic solution, helped to clean up the abscess cavity. On looking into the pelvis, coils of bowel could be noted covered with flaky material. Two large rubber drainage tubes were lodged in the wound, their deep ends lying inside the peritoneum; to control some venous oozing, iodoform gauze was filled in around the tubes in the deep part of the incision. A few gut stitches served to close the anterior one-third of the incision.

Progress of the Case.—His convalescence was uninterrupted, and now, three months after the operation, he is well.

What occasioned the intra-peritoneal accumulation of pus? Though the inquiry has been prosecuted to find a cause, there has been no success.

TO MEDICAL MEN.

Wanted immediately an unmarried Qualified Assistant, with view to partnership, to live in the house. Communicate with Dr. PAYNE, Thames, New Zealand, stating age, etc., etc.

SIXTH INTERNATIONAL OTOLOGICAL CONGRESS.

THE Sixth International Otolological Congress will be held in London, on August 8th, 9th, 10th, 11th, and 12th, 1899. President: Dr. Urban Pritchard, Professor of Otology at King's College, London. The meetings will, by permission, be held at the Examination Hall of the Royal Colleges of Physicians and Surgeons, Victoria Embankment. The subject chosen for special discussion is "Indications for opening the Mastoid in Chronic Suppurative Otitis Media." A large and influential British Organisation Committee has been formed, the treasurer being Mr. A. K. Cumberbatch, 80 Portland Place, London, W., and the hon. secretary Mr. Crosswell Baber, 46 Brunswick Square, Brighton. The International Otolological Congress, which assembles every four years, met last in Florence, where a very successful gathering was held under the Presidency of Professor Grazi.

CASE OF FOREIGN BODY IN THE NASO-PHARYNX.

By G. A. FISCHER, B.A., M.B., CH.B., ADELAIDE.

MRS. T—, *æt.* 45 years, was referred to me on the 9th January last, on account of a very fetid discharge from the right nostril, which had persisted for fourteen months, and resisted all treatments.

She had been suffering from lachrymal duct trouble for some two years previously, which, in spite of much probing, had steadily become worse—about fifteen months ago a laminaria tent was inserted into the duct, and as part only of it was able to be withdrawn again, an attempt had been made to push the remaining portion down into the nose; but patient does not think the attempt was successful. Shortly after this she had discharge from her right nares.

When first I saw her the right nasal fossa was filled with fetid thin liquid discharge, the removal of which failed to reveal any foreign body—the swollen middle and inferior turbinates prevented me seeing far back into the nose; but on examining her naso-pharynx the post rhinoscopic mirror revealed a thick, dark object lying across the right roof of the pharynx, one end of which was evidently in the right Rosenmüller's fossa, the other one lying against the right side of the vomer. This I removed with the snare under guidance of the post rhinoscopic mirror after I had freed the end which was pressing on the vomer, and found it to be a thick swollen piece of sea tangle—the mucus membrane in the various places upon which it had been pressing was now seen to be ulcerated, and both choanæ appeared now to be quite free of any foreign body.

As, however, some discharge still persisted after the healing of the ulceration, I concluded that some irritant must still be present, and accordingly examined the spaces beneath both swollen turbinates, and succeeded in dislodging from beneath the right inferior turbinate another large piece of swollen sea tangle, which had evidently been firmly impacted in its hiding place, and had not been disturbed by my probe whilst cocainising the mucus membrane on the same side prior to inserting my snare.

On probing the anterior wall of the sphenoidal sinus nothing abnormal was to be detected, and transillumination of the antrum of highmore showed that cavity to be free from any affection.

APPLICATIONS are invited for the position of Resident Doctor at Moulamein. Appointments £150 p.a. Full particulars on application to the undersigned. A. K. PARKER, Hon. Sec. Doctors' Fund, Moulamein, N.S.W.

AMCEBIC PULMONO-HEPATIC ABSCCESS.

By JOS. C. VERCO, M.D. LOND., ETC.,
ADRLAIDE, S.A.

A.H. was first seen by me on June 9th in consultation with Dr. Magarey. He was forty-one years of age; a police trooper, stationed at Mannahill in South Australia. About February 10th, 1898, seventeen and a-half weeks ago he began to have diarrhœa. This continued for about ten weeks, but it gradually diminished during the latter part of that time. He saw Dr. Stevenson, of Petersburg, on March 3rd. No blood was seen in the stools in the earlier days, but after a little time mucus and blood were passed, and simultaneously he began to experience a burning pain rather more than a finger's breadth up the bowel. He had no straining or tenesmus. Occasionally he would stop in bed for a day or two, and then lie on the couch, but he was able to do all his clerical work. He came up to town on the 25th, and went to Henley Beach and consulted Dr. Magarey. Under treatment the looseness of his bowels nearly ceased, and the blood and mucus were in very small quantity and he had very little abdominal pain. For about fourteen days he lay in bed or on the couch. Two days after he began to move about, i.e., on April 7th, he was seized with a pain in the right side of chest, in front and at the back, but worse behind. This gradually but rapidly increased, so that by the evening it was quite severe. It was like a knife when he drew his breath, and as he had to get out of bed frequently on account of his diarrhœa it gave him great distress. With poultices the pain was much reduced by the morning, and these were continued for about ten days. Then he was allowed to be up in the bedroom, and seemed to be improving. During this acute attack he had no cough, but on the third day after being up in the early afternoon he suddenly began to cough violently, expectorating white phlegm streaked with blood, and this kept on all night, but only a small quantity was raised. Following his doctor's advice, he came up to town the next day. About two weeks ago he had had a quiet day, fairly free from cough, and had eaten well and felt better, but about 8.45 p.m. there came a rush of blood, and in a few minutes, probably about ten, he had coughed up, he says, about three pints; his wife says a full pint, not of fluid blood, but thick, clotted stuff, which stood up in a heap in the vessel. It came through his nose as well. Ever since then he has been

expectorating brown clots, without any disagreeable odour. From that time, also, he has had no looseness of the bowels. They have moved regularly daily, and been rather costive.

From the date of onset of the pain in his side until the hæmorrhage he had most profuse perspirations, soaking his bedding, but no rigors have been noticed throughout his illness. No skins have been expectorated, nor anything which could be regarded as a sign of hydatid.

The heart's apex beat was in the left fifth space, about an inch outside the vertical nipple line; no cardiac murmur was audible. On the right side impaired resonance commenced at the nipple, which was in the fourth space, and ran horizontally outwards, with a slight inclination upwards, and with a curved fall towards the sternum. Absolute dulness began at the fifth space, and ran nearly horizontally outwards, and fell slightly inwards. The vocal resonance above was quite good, as was also the respiratory murmur, down to the level of impaired percussion resonance; then it grew weaker, and was lost over the area of lost resonance. Above the fourth space was a slight friction rub, more marked, and over a wider area, in the front lateral region. Near the sternum, at the lower part, were some subcrepitant râles.

Posteriorly impaired resonance began at the spine, at about 2 inches above the level of the angle of the scapula, and ran downwards and outwards to one inch above the angle of the scapula, and sloped rapidly down through the lateral region. Absolute dulness rose to an inch above the scapular angle, at the scapular line, and fell very rapidly towards the spine, leaving a somewhat resonant area near it about two inches wide; outwards there was a very slight decurrence to the posterior lateral region; it rapidly fell to the fifth space in the nipple line. The respiratory murmur was very good over the right upper back to the line of percussion impairment, then it grew rapidly weaker. Vocal resonance became much weakened at the level of impairment of percussion resonance, and was almost lost below. There were no adventitious sounds on the right side. But for some subcrepitant râles at the base, the left side was normal. The liver could not be felt in the abdomen, and gave no dulness on percussion. The ends of the fingers and thumbs were very distinctly clubbed. There was no œdema of the side, or sign of pointing, and no œdema pedum.

Past History.—He came to this colony from England fifteen years ago. About five years afterwards he was stationed in the Northern

Territory, where soon after his arrival he contracted fever, and was in the hospital for three weeks; but he had no attack of diarrhoea or dysentery. After some five years' residence in the Territory he returned to South Australia proper, and was at Bute for six months. He had been at Mannahill about four years, when he contracted his present disease. At the time when he took ill many others in the township had disordered bowels, from which the people frequently suffer after the first rains following the hot summer weather.

On the next day, June 10th, I aspirated his right back in the seventh space, and drew off some thick reddish-brown purulent fluid, similar to what he was expectorating. So he was advised to have the chest opened and drained, the diagnosis being a hepato-pulmonary abscess, secondary to dysentery.

He was admitted to the private hospital, Wakefield Street, on June 11th. His temperature ranged from 99° F. in the morning to 102° F. at night. His pulse was 98. He had a troublesome cough, with expectoration of half-a-pint of sanious thick sputum, with much pain in the right back. He could not lie down, but sat propped up by a rest in bed.

June 14th: pulse, 104 to 108; respiration, 28. His bowels were opened yesterday, the motion being large, formed, and of a light terra cotta colour.

On June 15th., Dr. Lendon saw him with me in consultation, and agreed as to the advisability of operation. He put the patient under ether, and Dr. Magarey kindly assisted me. An aspirator needle introduced into the seventh intercostal space, about an inch posterior to the scapular line, withdrew some clotty sanious pus. About two and a-half inches of the eighth rib were excised, the incision (an inch and a-half in length) was carried through the thickened pleura and subjacent parts, and at about the depth of three-quarters of an inch, or an inch, the cavity was struck. It contained no free fluid pus, but clotted reddish brown material of the consistence of half-set jelly, mixed with yellowish or greyish pus. The finger was not long enough to explore the depths of the cavity. Below, as far as the finger could reach, seemed to be the fairly smooth dome of the diaphragm. Above was a ragged pultaceous roof, with septa dividing it into pockets or loculi. As much of the free material as would run out, or could be hooked out with the finger, was removed. Four ligatures were carried through the whole thickness of the cavity wall and chest wall, and tied as a precautionary measure to anchor the cavity, though it seemed quite firmly adherent,

and two large drainage tubes were stitched in, and the ends of the incision sewn up.

He did not cough up any more of the red sputum after the operation; but there was always abundant discharge through the wound of thick, clotted reddish material, with greyish white purulent streaks and lumps, and occasionally small sloughs of tissue.

On the 17th he was syringed out with warm boracic lotion, which gave rise to no coughing.

On the 18th a weak solution of quinine was employed—1 in 3,000—and no discomfort was experienced; but during the morning he was troubled with violent coughing, and his breathing was very wheezy, and he raised a good deal of very frothy white phlegm. His temperature at night was 99° F., and he had rather abundant bronchitic râles over the left back and lateral region.

June 19th. Pulse 128. The râles were fewer and the sputa much less. Temperature at night, 100 8°. The cough was attended with sharp pain in the right hypochondrium and over the hepatic region.

June 20th. Pain much less. The course was almost uninterruptedly downward. His temperature, which rose on the 20th to 102·4°, remained high at night, throughout his illness, with varying morning remissions, very rarely with intermissions to normal. His cough was very troublesome, the sputa being very scanty, tenacious, slightly frothy, nearly white mucus, slightly yellow. During the last two days of his life it was tinged slightly with blood.

He gradually emaciated, although he was able to take his soft food fairly well. For a short time, while his bowels were quiet, he took solid food with an appetite.

His bowels were moved every day or two, with quite natural motions. But a week before death these became loose and more frequent, until he had diarrhoea, which was quite uncontrollable by drugs and dieting. It was attended by painful cramps in the legs, and rapidly reduced his strength, and finally carried him off.

At first he had much pain in the right hypochondrium and over the hepatic region, especially vexatious on coughing, but this gradually and almost completely subsided. No enlargement of the liver downward could be detected, nor any friction rub felt or heard.

The cavity in the lung remained free from fœtor until the last day. But it did not appear to contract or collapse. The wound in the chest wall united at the posterior part, where it was brought together with stitches, but the opening into the lung did not diminish; in fact, it grew rather larger, so that the tubes

went along it more easily. After about three weeks the edges of the wound began to grow greyish and became very prominent and pouting, the swelling gradually fading off into the normal level of the chest wall at a distance of about an inch and a-half. This was more marked in the lower lip of the wound. There was no redness and no tenderness, but the subcutaneous tissue underwent a kind of quiet swelling and soft necrosis, and the necrosed tissue showed under the microscope abundant amœbæ. A stitch hole gradually enlarged, and the undermined skin edge slowly ulcerated. There seemed to be an invasion from within outwards of the incision into the thorax by the amœba, which caused a swelling and melting away of the tissues; so that no tendency to closure could be seen, but rather to extension of the thoracic mischief.

He rapidly lost strength after his bowels became loose, and he died on June 22nd.

A *post mortem* was made about four hours after his death. There was a good deal of fat in the subcutaneous tissue and in the mesentery and omentum. The omentum was adherent to the sigmoid flexure and to the right side of the cæcum coli, and on separating it from the latter an abscess behind the caput coli was opened. The colon was extensively ulcerated from the rectum to the ileo-cæcal valve, and about an inch of the small intestine close to the valve had its mucous membrane thickened and injected. A great many small ulcers were scattered about the large bowel, circular, and varying in size up to third of an inch in diameter. But others were as big as a shilling piece, and one in the back part of the cæcum was as large as a half-crown piece. They had a greyish yellow sloughy base, and the necrosed subcutaneous tissue could be picked away with forceps and yielded abundant motile amœbæ. One or two had destroyed the muscular coat, leaving only a peritoneal investment; and a large one had perforated the back of the cæcum, and formed an abscess with very sloughy walls and base. The margins were not indurated, but to some extent undermined. The coats of the bowel were succulent and swollen over and around them. The small intestine and stomach were free from ulceration.

The liver was questionably enlarged, and was quite normal except that it was adherent to the diaphragm at its upper and back part, and here in its substance was a solitary abscess cavity, with pockets and without a limiting wall, not sufficiently large to admit a walnut. The diaphragm was perforated by a hole, which would admit the little finger. The right lower

lobe of the lung was adherent and solid, and had at its extreme base a large abscess cavity. The floor of this was formed by the diaphragm, while the solid lung tissue was ragged and irregularly excavated above. There was no fetor or gangrenous odour. It communicated freely with the operation wound. The upper lobe was united to the thoracic wall by recent adhesions, easily broken down, but was otherwise normal. The walls of the cavity contained living amœbæ. The left pleural cavity was completely obliterated by old adhesions, and the base of the lower lobe was collapsed. The heart was normal, as were also the spleen and the kidneys.

This case is recorded in full, because of the interest attaching to it, as the first instance in which the amœba dysenteriae has been recognised in South Australia, and as an instance, and the first one, in which amœbic abscess of the liver has been proved to originate in Australia. After I had brought this instance under the notice of the Association some months ago, Dr. Isbister, of the Sydney Hospital, wrote to me saying the parasite had been detected in Sydney, but only among immigrants, chiefly from the South Sea Islands, etc; but was not known as having arisen in the colony of New South Wales. My patient, however, would appear to have contracted his disease in our colony, for, though he had been in the Northern Territory, he had no attack of dysentery there. He had been in the southern part of South Australia for five years before his death, and his dysentery had existed for less than five months. It was certainly contracted in Mannahill, or its immediate vicinity, a township 233 miles from Adelaide.

Amœbic abscess of the liver has been noted in Europe, North and South America and Africa. The continent of Australia may now be regarded as a part of its habitat.

The diagnosis of amœbic abscess of the liver was made upon purely clinical grounds, before the parasite had been demonstrated, because the history so closely resembled that of recorded cases of this complaint. The patient had suffered from dysentery for about three months, followed by acute pain in the right chest and profuse perspirations, and had the physical signs of a pleuropneumonia of the right lower lobe, complicated with profuse expectorations of an almost pathognomonic sputum, suddenly raised as though from something which had burst. Aspiration demonstrated a collection of the same material at the base of the thorax. Such a history points almost certainly to amœbic abscess, hence the parasite was diligently sought, and though

the earlier examinations of the sputum were not quite satisfactory, yet repeated investigations revealed the living amœba in the discharges, and when the subcutaneous tissue became infected the parasite was easily and abundantly obtained alive. After seeing it in its motile state, and then when it had died, so as to become familiar with the dead organism, one could speak much more positively as to its presence in a sample of pus.

Preservation of amœbæ for demonstration to others was very difficult. Pus proved to contain them in numbers, was stained and fixed with various reagents, but the parasite could not be certainly recognised in these preparations. Some pus, mixed with five per cent. solution of formalin, showed them in a better state of preservation than anything else, though the distinction between ectoplasma and entoplasma was obliterated.

Some of the expectoration was examined by me under the microscope on June 14th, and I found what I thought were probably the amœbæ dysentericæ, but I could not be quite sure. But some of the material which ran from the tube during dressing of the wound on the morning of the 16th was examined by me three hours afterwards, and in a drop of the yellowish grey curdy pus in one slide four or five amœbæ were visible. These were demonstrated to Dr. Lendon, Dr. Borthwick, Dr. Magarey, and others, who confirmed my observations as to their movements. When round, they measured about four times the diameter of a red corpuscle, were distinctly bounded externally, and of a clear, homogeneous appearance, like very finely ground glass. No greenish tinge was discernible. In the centre was a large mass of entoplasm, of about half the diameter of the whole organism, granular or lumpy, so as to have an irregular outline, looking like a close aggregation of granules or corpuscles; it had a faint brownish red tinge. An amœba from being circular might be seen to become elliptical, then pear-shaped, then with a depression in one side. The entoplasm at first in the middle would seem to move towards the circumference, till one-third of its mass projected beyond any visible ectoplasm. These alterations in shape were sometimes very slow, and at others fairly rapid; in fact, occasionally the changes were very frequent and very quick, so as to make any attempt to sketch their shape quite impossible; before the outline could be finished it was quite different from what it was when begun. Once two amœbæ were found together touching at one point and very active, one might have thought them engaged in a

wrestling match; they pushed out their round pseudopodia now here and now there, so as to move each other about the field, and produce the most rapid, remarkable, and interesting variations in form. Their motility was retained for a considerable time. Often they were examined six hours after being mounted, having in the meantime been carried about in the carriage in midwinter for over two hours. They were placed under the microscope in the consulting room at its ordinary temperature, and without a warm stage.

Searching for them in the discharge which flowed from the cavity was tedious and uncertain. Many slides might be examined without the detection of a single parasite. But when the margins of the wound became infected, a minute portion of the necrotic subcutaneous tissue could be relied on to furnish several specimens under a single cover glass. They were not readily recognised in a field of pus; their outline was too indistinct to be seen without careful focussing when overlain by pus cells, and these necessarily covered over the homogeneous transparent ectoplasma. But when one happened to be in the open, and free from pus it was very certainly recognised.

They varied considerably in size, some being three times the diameter of others.

Red blood corpuscles could be seen in intimate relation with them, some were within the area of their outline, but it was difficult to be sure they were in their substance and not lying on their upper or lower surface. Frequently a corpuscle could be seen attached to the margin of the amœba, and plainly outside it.

The death of the patient was a disappointment, but was not by any means a surprise. For in the first place, hepato-pulmonary abscess is an exceedingly fatal complication of amœbic dysentery. Lafleur, in his excellent article on "Amœbic Abscess of the Liver" in Allbutt's "System of Medicine, 1897," Vol. IV., says:—"The prognosis of amœbic abscess of the liver and of the lung is very unfavourable. . . . Surgical intervention, moreover, is not as a rule followed by such satisfactory results as in the case of non amœbic abscess. In a series of eleven cases of liver abscess observed in Baltimore, of which seven were of amœbic origin and four non-amœbic, one of the former and three of the latter ended in recovery. Three of the amœbic cases were operated on and all died, the only recovery being a case of hepato-pulmonary abscess, which emptied itself spontaneously through the bronchi." One recovery out of seven, and that in a case of spontaneous rupture through the bronchi, is not very encouraging.

In the second place, the revelation at the *post mortem* of the condition of the bowels explains very largely the slender hope we can have of recovery from the abscess. Not only was the intestine beset with ulcers from ileo-cæcal valve to anus, but one of these had occasioned a sloughy post-cæcal abscess. How a patient could live with his alimentary tract in such a state—apart from a hepato-pulmonary abscess—seems strange. And what seems stranger still, and introduces an element of uncertainty into these cases, is the latency of the dysentery. For two weeks before I saw him his bowels had been quiet and even constipated, and for a month afterwards there was no looseness of the bowels. One might have been disposed to think they were but little affected, or had quite healed, and that only the hepato-pulmonary abscess remained to deal with; but, instead, they were found to be extensively ulcerated.

In the third place, the manner in which the wound conducted itself was something quite new in my experience, and obliterated all hope of success to the operation. And this appears to me to be a most formidable obstacle to recovery. When an abscess cavity is opened and drained freely at its most dependent part, one expects it to grow smaller, and the tubes which are inserted easily enough at first, to become more difficult of introduction from the growing in of the sides of the abscess and of the incision. But here the tubes become looser, and the incision through the pleura more capacious, and even the external wound grew larger. And this without any signs of inflammation. In fact the amœba infected and infiltrated the tissues along the track of the tubes, and destroyed them, invading the subcutaneous tissue for an inch and a half from the incision.

Is it of any use, then, to incise the chest wall in such a case? Lafleur says: "Notwithstanding the slender hope of recovery after operation, the treatment of amœbic abscess of the liver and lung must be surgical. . . . In hepato-pulmonary abscess which is discharging itself spontaneously and freely, it is questionable whether surgical intervention is at all likely to advance the recovery of the patient. The abscess is usually so deeply seated, and efficient drainage is so difficult to establish, that unless the physical signs be very definite and localised, it is probably more prudent to abstain from operation." I think in spite of the above dictum, which is founded upon one case, wherever possible the collection of pus, whether in the liver or lung, should be opened. All the cases of

amœbic abscess of the liver operated upon died; but yet, who would think of leaving a known abscess of the liver unopened. To do so would surely be a transgression of one of the fundamental rules of surgery. It must be opened, and if invasion of the incision by the amœba be possible or probable, means must be adopted to destroy it by appropriate injections and applications. So also in a hepato-pulmonary abscess, when it has been diagnosed by the history and physical signs, and has been demonstrated by the aspirator, a surgeon would surely have no option, but would be constrained to open and drain it. If it had not burst into a bronchus, the application after incision of parasiticide remedies by injection would probably not be attended by much more difficulty or danger than in any abscess confined in the liver. It is true the aperture of communication through the diaphragm between the lung abscess and the liver might be small, and its situation such as to make it difficult or impossible to inject the liver cavity from the lung, and the liver cavity might constitute an unfailing source of living amœbæ for the continuous infection of the pulmonary cavity. But this disadvantage would scarcely induce one to leave an accessible amœbic collection in the lung undrained.

When it has burst into the bronchus the case is somewhat different. One individual did recover after such spontaneous evacuation. But if this is an argument against draining a burst hepato-pulmonary abscess, is it not an equally strong argument against draining unburst abscesses of the same nature (for all those operated upon have died), and would it not be better to leave them alone, and let them burst spontaneously into the bronchus, and get well? And so with pure hepatic abscesses, if amœbic. As all those when interfered with have succumbed, why not temporise, and let them either burrow up into the lung, or outwards to the surface in some other direction? But this would be unsurgical and unjustifiable, and no one with any surgical instinct could stand by and not interfere with such collections.

And so it seems to me that even though the abscess have burst into the bronchus, if the aspirator proves the existence of a collection in the base of the chest, and near enough to the chest wall to allow of fairly easy access, it should be opened and drained, and the earlier the better. It is surely more likely to close if its contents have a free exit at the most dependent part than if only the overflow is coughed up from the summit of the abscess.

Since, however, the gravity of these cases seems to depend on the presence of the parasite and its invasion of the walls of the abscess and of the incision, even after thorough drainage is established, the endeavour should be to kill the parasite. Where only an abscess of the liver is being treated, or one in the lung which has not burst into a bronchus, fairly strong solutions of drugs known to kill the parasite could be employed, as injections, and even injected under pressure with the wound plugged, so as to force the solution into the interstices of the abscess wall, where the amœbæ have penetrated.

Where there is communication with a bronchus, injection under pressure is impossible, and even simple flushing can only be effected to a limited degree, because the solution flows into the bronchus and excites severe cough.

But what further seriously complicates the cases, and may make such endeavours though successful almost hopeless, is the affection of the bowels. Here is the original source of the hepatic and pulmonary disease. This source remains uninfluenced by treatment directly solely to the liver or lung, and so may supply abundant parasites for re-infection of these organs. Large enemata of parasiticide drugs have been advocated, and with some degree of success, for the destruction of the amœbæ, which have established themselves in the intestine. But I question whether the organisms will be very often completely got rid of in this way. A plan which suggests itself as more likely to be efficient is to deal with amœbic disease as actinomycosis is attacked, and get into the system some drug which will kill the parasite. Iodide of potassium will destroy actinomycosis even when extensively present in the human body. And although the ray fungus belongs to the vegetable kingdom and the amœba to the animal; and what is fatal to the former might be quite harmless, and even nutritious, to the latter, I should employ in the next case coming under my care, iodide of potassium, rapidly running it up to huge doses. It would do the patient no harm, and it would, perhaps, give an extra chance in what is almost to a certainty a mortal disease.

"FOLIE A DEUX."—In *Treatment*, December 8th, 1898, appears a notice of the foregoing article, which was contributed to the *Australasian Medical Gazette* by Drs. J. L. Thompson and Beattie Smith, and appeared in this journal in August, 1898.

"ACUTE Inflammatory Glaucoma Induced in a Susceptible Patient by Dengue," a paper by Dr. J. Lockhart Gibson, which was published in the *Australasian Medical Gazette* for August, 1898, is quoted from in the *Journal of Tropical Medicine*, December, 1898.

A CASE OF SUPPURATING HYDATID OF THE LIVER.

By CHARLES MACLAURIN, M.B. EDIN., HON. ASSISTANT SURGEON TO PRINCE ALFRED HOSPITAL, AND TO THE WOMEN'S HOSPITAL, SYDNEY.

THE following case, while presenting few, if any, unusual features, is of interest as showing the value of what one may call "stethoscopic percussion"—the "rod-pleximeter percussion" of Vierordt—in the diagnosis of obscure abdominal swellings. This method of percussion, which was first introduced by Heubner* for the investigation of pneumothorax, was subsequently applied to the percussion of the stomach; and, I believe, it will also be found of value when examining other cavities distended with gas. To carry it out, the physician listens with a binaural stethoscope placed over the centre of the hollow viscus to be examined, and held there by the patient's finger, while at the same time he percusses lightly in lines radiating from the stethoscope. As the border of the viscus is passed, the sound, which was loud, near, and booming, suddenly becomes faint, distant, and muffled, so that it is difficult to mistake the moment when one leaves the viscus. The reason of this change is that percussion over a distended viscus sets up vibrations in its contained gas, which are heard through the stethoscope as booming sounds; but, on passing to a neighbouring organ (even if equally distended), the gaseous vibrations are checked by the lining walls, leaving the sound to be transmitted to the stethoscope by the abdominal wall alone—a most imperfect transmitter.

Clifford Allbutt† writes somewhat doubtfully of the value of this method, as applied to the stomach, though he considers that it is of service to confirm a diagnosis otherwise made. Nevertheless, it seems to be coming into general use, at any rate for defining the stomach; and as Professor Allbutt also says that there is no distinctive stomach note, and that it is impossible accurately to percuss out the stomach in the ordinary way—a statement with which most clinicians will agree—any method which promises us an approach to accuracy appears worthy of a careful trial. The present writer percussed a series of fifty surgical and gynecological patients, with the stethoscope first placed on Traube's stomach-area, and then, for the colon, immediately above the umbilicus. In each case it was possible to map out areas of

* Vierordt's "Clinical Diagnosis," p. 135.

† "A System of Medicine," by Many Writers, Vol. III. p. 506.

"booming" sound, which, when pencilled on the skin, corresponded nearly to the outlines of stomach and colon as given in the text-books and as seen on opening a cadaver. It appears in some cases to be possible to map out the whole stomach, and the whole colon from the cæcum to the sigmoid flexure, and it is not difficult to tell when one passes from colon to stomach and *vice versa*, even though one viscus overlap the other.

Patient, aged 19, unmarried, was operated on at the Prince Alfred Hospital for a hydatid of the right lobe of the liver, in August, 1898. There was then no perceptible indication of the presence of any other cyst. While this hydatid cavity was closing she contracted measles, and had to be sent to the Coast Hospital, Little Bay. On returning thence, early in October, she came under my care, owing to Dr. McAllister's absence on leave, and complained of pain in the epigastrium, with some dyspepsia, vomiting, and a tendency to constipation. On examination, the old hydatid wound was found to be a mere sinus, discharging bile, and evidently closing; the liver-dulness in the middle line was somewhat increased; the edge of the liver here was rounded, tender, and about an inch lower than normal; the temperature was not raised, but the pulse was about 100. She was greatly exhausted.

The girl's condition became still worse, and an evening rise of temperature began to occur, passing into pronounced hectic. Although the tenderness in the middle-line became more marked, and the liver was enlarged, I did not feel justified in putting an exploring needle into a part with such important relations, unless there were more definite indications.

On October 31st the upper part of the abdomen was found to be greatly distended, there being also vomiting and constipation, while the evening temperature for some days had been 101° and the pulse 120. The enlarged liver could no longer be felt, owing to the tenseness of the abdominal wall, and the percussion note was uniformly tympanitic over the positions of the stomach, colon, and the tender area in the epigastrium.

The diagnosis lay between gastritis with distension, distended colon, and an abscess (probably hydatid) of the liver, containing gas. It was necessary to guard against attaching too great importance to the liver enlargement, because Dr. Graham* has shown that in hydatid of one lobe there is usually compensatory en-

largement of the rest of the liver. By means of "stethoscopic percussion" we were enabled to map out the stomach, the colon, and a large tympanitic cavity lying anterior to the pylorus, above the colon, and in the left lobe of the liver. When the patient was anæsthetised, a needle was inserted, but was blocked, and nothing came away but some foul gas, which smelt as if its source was a distended colon; but in the subsequent operation a hydatid cyst was found in the left lobe, containing gas, pus, and decomposed daughter-cysts. This cyst corresponded very nearly in size to the estimate formed beforehand by percussion.

The noteworthy points about the case are, the ease with which the diagnosis was cleared up by the combined method; the comparative exactness with which it enabled us to estimate the size of the cyst; and the fact (frequently, of course, observed) that the exploring needle obtained no pus, owing to its being blocked by cyst-membrane.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

The Annual General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday March 31st, at 8.15 p.m.

Business: Report of Council and Treasurer's Statement; Presidential Address; Election of Council.

Members are reminded that the annual subscription for the current year (£2 2s.) is now due, and should be forwarded to the Hon. Treasurer, Dr. Crago, 16 College Street, Sydney.

G. T. HANKINS, Hon. Sec.

CRAIG COLONY PRIZE FOR ORIGINAL RESEARCH IN EPILEPSY.—The President of the Board of Managers of Craig Colony offers a prize of \$100 for the best contribution to the pathology and treatment of epilepsy, originality being the main condition. The prize is open to universal competition, but all manuscripts must be submitted in English. All papers will be passed upon by a committee to consist of three members of the New York Neurological Society, and the award will be made at the annual meeting of the Board of Managers of the Craig Colony, October 10th, 1899. Each essay must be accompanied by a sealed envelope containing the name and address of the author, and bearing on the outside the motto or device which is inscribed upon the essay. The successful essay becomes the property of the Craig Colony, for publication in its Annual Medical Report. Manuscripts should be sent to Dr. Frederick Peterson, 4 West 50th Street, New York City, on or before September 1st, 1899.

THE NEW SOUTH WALES LAGER BEER BREWING COMPANY.—The F. F. Brewery in Barmen, Germany, was awarded first prize and gold medal over all the German beers exhibited at the Brewing Exposition at Ramscheid. The plant used by the N.S.W. Lager Beer Brewing Co. is in every detail a similar plant.

* "Hydatid Disease," p. 91. There is a good plate showing an extreme case of this condition.

PROCEEDINGS OF BRANCHES.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

Members of the New Zealand Branch are informed that the "Australasian Medical Gazette" will be forwarded to all members who received it last year. Any member wishing to discontinue it, is requested to intimate the same to the Gen. Sec., Dr. Graham Campbell, Christchurch, within fourteen days.

A MEETING of the Council of the British Medical Association, New Zealand Branch, was held on Wednesday, 4th January, 1899, in the University Buildings, at Auckland. Present: Dr. Pollen, representing Wellington; Dr. Gibbs, representing Nelson; Dr. Fleming, representing Otago; Drs. Pabst and Dawson, representing Auckland; Drs. Mason and Cleghorn, representing Canterbury; Dr. Fell (President of the Branch), Dr. Scott (President-elect), in the chair.

CORRESPONDENCE AND ACCOUNTS.

1. Letter from the Canterbury Section inviting the Council to hold the annual meeting in Christchurch in 1900. The third week in February, 1900, was suggested for the date of the meeting. Resolved,—“That the invitation of the Canterbury Section be accepted.”

2. Letter from the secretary of the Hawke's Bay Section notifying the disbanding of that Section. In reference to this, the General Secretary explained that the Napier Section thought they had not a sufficient number of members to make it worth while keeping up all the details of monthly meetings, etc., but at his suggestion they still intended having a local committee for the recommendation to Wellington of business of local interest. Resolved,—“That the letter be received.”

3. Letter from the local editor of the *Australasian Medical Gazette* re change in the New Zealand editorship of the *Gazette*. In reference to this matter, Dr. Gibbs said that a year ago a recommendation was sent from the Nelson Section to the Council meeting in Wellington that the association existing between the New Zealand Branch and the *Australasian Medical Gazette* should be dissolved, and that the New Zealand Branch should resume the publication of their own journal, and asked if any reply had been sent to that recommendation. The General Secretary informed him that no reply had been sent. Dr. Gibbs then pointed out that the New Zealand journal had cleared expenses and paid its way. They had now had two years of the *Australasian Medical Gazette*, and the second year the circulation had decreased. The General Secretary explained that the first year it was obligatory on the members to take the *Gazette*, and the second year it was not so, and the circulation had fallen from 170 in the first year to 105 in the second year. The Nelson Branch notified that they intended giving notice of a motion that the *New Zealand Medical Journal* be resuscitated under the auspices of the New Zealand Branch of the British Medical Association. In reference to the New Zealand editorship of the *Australasian Medical Gazette*, Dr. Fell said that he had been speaking to Dr. Barnett in Wellington about

the matter, and he told him that he had placed his resignation in the hands of the meeting, for he felt he had not received the support which he might have expected from members of the profession, and he thought somebody else ought to have a try to make the thing a success. Still, he had led Dr. Fell to understand that he would be willing to continue his editorship of the *Gazette* should it be the wish of the meeting. Resolved,—“That the meeting acknowledge its great indebtedness to Dr. Barnett for his editorship of the *Australasian Medical Gazette*, and request him to continue his editorship pending the consideration of a notice of motion given by the Nelson Section to the effect that the *New Zealand Medical Journal* should be resuscitated.”

Accounts amounting to £10 6s. 7d. were passed for payment.

THE HAGEY INSTITUTE.

A member of the Branch attended and explained the position of the Hagey and other institutes in New Zealand. He said it appeared to him to be necessary for some medical man to come before the Council with the object of endeavouring to prevent members of their profession from covering in any shape or form a body of unqualified persons. As soon as these people—he referred more especially to the Hagey Institute—were exposed as mere swindlers in one part of the colony, they obtained a fresh footing in some other town and by means of advertisements for the bi-chloride of gold treatment for narcotism and alcoholism, they succeeded in establishing a syndicate, and not only extorted money out of the members of the syndicate but also did a great deal of harm. Lately, during November, there were two cases of sudden death in his district, both of the deceased having been recently subjected to this bi-chloride of gold treatment for alcoholism. In one case, a case of suicide, he was called by the police to see the deceased, and in the course of the investigation before the resident magistrate the fact was elicited that the people who ran this bi-chloride of gold cure for drunkenness made the astounding statement in court that they in every case had a medical certificate sent by a duly qualified medical man as to the health of the individual before he was subjected to the treatment. He said that astonished him very much, and he told the magistrate in court that he knew that that proceeding was altogether unorthodox and contrary to the ordinances of the profession, and if he knew of any medical man who covered them in that way he would report the matter to the proper authorities. He did not desire in any way to individualise any person, but he merely came before the Council with the object of seeing what could be done to stop these proceedings on the part of medical men in the future. It would not be necessary for him to go into the whole story of the bi-chloride of gold cure for drunkenness, how it was published in America practically twenty-five years ago, and how an attempt was made to thrust it on the English market. He thought that great credit was due to the Temperance Society of London for their action in regard to this matter. The only object that people who ran institutions like the Hagey Institute had in view was to extort money out of the public, and it was discreditable to the medical profession that any member of it should cover them in any way. He thought the members of the Council would agree with him that this practice must be put a stop to, and the sooner this was done, and the more publicity was given to the fact that the members of the medical profession in New Zealand would not countenance anything of the kind the better. He had said enough, he thought, to show how urgently necessary it was to do this, for

these societies, as soon as they were defunct in one place, went to another, and advertised in the local papers that they had patients from all parts of the colony. To his certain knowledge the managing director of the American Institute in his district (they called it the American Institute there so as not to have the unsavoury name of the Hagey Institute of Auckland associated with it) publicly notified that patients came from all parts of the colony for treatment. He thanked the members of the Council for the patience with which they had listened to him, and said he thought that if the Council would act in the way he had suggested, they would be doing something that would be beneficial to certain members of the profession who were acting, to his way of thinking, contrary to medical ordinances.

Resolved,—"That the subject be referred to the general meeting, with the recommendation that a notice be sent to all the medical men in the colony advising them that the Council intend referring this subject to the General Medical Council in London should any case come before their notice of a member of the profession attaching himself to such an institution."

PETITION.

A petition was received from Mrs. Jessie MacKenzie of Auckland, addressed to the Hon. the Speaker and Members of the House of Representatives in Parliament.

It was recommended by the Council for the signatures of members, sections 8 and 5 being deleted.

An application was received from Dr. Finlay, of Auckland, mentioning that he was entitled to affiliation to this Branch, and requesting a pass to Rotorua.

The Council, after an explanation by the Secretary, decided that they had no jurisdiction in the matter, and the Secretary was instructed to communicate this to Dr. Finlay.

A letter was received from the Department of Agriculture stating that arrangements had been made that Mr. Gilruth should undertake the work of pathologist and bacteriologist to the medical men of the colony.

In reference to this, Dr. MASON explained that the Government were now prepared to import sera in bulk. It would go to Wellington, and on application any medical man could have a supply of it. Further, if any medical man sent specimens for examination they would be reported on free of charge. Another point was that the Government were going to supply all medical men on application with a tube of cultured media for ordinary diseases, such as diphtheria. This would be placed in the hands of the local officers in the various districts of the colony. Anyone in the Wellington district could apply to the laboratory direct. He proposed that they should appoint an officer in the large centres, to whom the medical men would be able to return their tubes for report. The media developed at blood heat, so that there was no difficulty in cultivating it.

Resolved,—"That a hearty vote of thanks be tendered to the Government for its action in reference to this subject."

Dr. FELL, in supporting this motion, drew attention to the fact that it was solely due to Dr. Mason's energy that they were enabled to thank the Government for such advantages.

ELECTION OF MEMBERS.

The following members were elected:—V. H. Barr, Te Anahuia; J. Baird, Otautau; E. P. S. Gane, Christchurch; W. A. Logan, Dunedin; M. H. Payne, Thames; W. Todd, Invercargill; C. H. Upham, Lyttelton. And

the following were elected provisionally on the general secretary receiving the application forms which had been duly signed and forwarded to him:—R. Bedford, Auckland; H. Douglas, Auckland; A. L. Murray, Pukekohe; J. H. Neil, Auckland; W. E. Williams, Auckland; H. C. Wine, Auckland.

COLLECTION OF SUBSCRIPTIONS.

This question came up for discussion, the Secretary of the Auckland Section explaining that there seemed to be some dissatisfaction about the method now employed. He considered that it was red tapeism that the refund should be forwarded to the General Secretary, and then returned to the individual sections, and he recommended that an alteration in the present method should be adopted by which the local treasurer should be held responsible for the subscriptions of the members belonging to the Section.

The GENERAL SECRETARY stated that the difficulty of knowing the financial position of members in relation to the Branch was very great, unless the subscriptions were sent either direct to him or immediately forwarded by the Treasurers of the sections; and as some delay had often occurred in the latter, members were irritated by being asked for their subscriptions a second time, besides which it was impossible to find out which members wished to take the *Australasian Medical Gazette*. He pointed out that at the commencement of each financial year every member was debited with the sum of £1 10s., and that if the whole amount were not forwarded it greatly increased his work.

After this explanation the Secretary of the Auckland section thought that on talking the matter over with the Treasurer the matter might possibly be arranged.

Dr. MASON was instructed to communicate with the Government in reference to a special train to Rotorua.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE monthly meeting of the South Australian Branch of the British Medical Association was held on Thursday, January 26th, 1899. Present: The President (Dr. Swift), Drs. Giles, Harrold, A. E. Wigg, Michie, Singleton, J. A. G. Hamilton, Sweetapple, A. A. Hamilton, Poulton, Lermite, Lawrence, Gunson, H. M. Evans, G. C. Hayward, Cavenagh-Mainwaring, Gregerson, Morgan, Cleland, Fischer, W. A. Verco, S. J. Magarey, Symons, and the Honorary Secretary (Dr. W. T. Hayward).

LIVING EXHIBIT.

Dr. EVANS, for Dr. Lendon, showed L. B., *et. five* years, admitted on 17th June, 1898, with a large umbilical hernia about the size of a foetal head. The investing skin was ulcerated. Operated on on July 1st, 1898. A large circular piece of skin removed, including the ulcerated portion; sac opened. The hernia was reduced with the exception of a few tags of adherent omentum, which were ligated and cut off. The ring admitted four fingers. The sheaths of the recti were divided and united behind. Then the recti muscles sutured together. Then the fat and subcutaneous tissues, and finally the skin. The skin wound when sewn was horizontal. Healed by first intention. The result is still perfect, no bulging, and the abdominal wall is quite firm. (Dr. Lendon.)

PATHOLOGICAL SPECIMENS.

Dr. J. A. G. HAMILTON showed an ovarian multilocular cystoma removed from an unmarried woman, aged 32. On opening the abdomen twenty-five pints of thick grumous fluid escaped from the peritoneal cavity. The tumour, which sprang from the right ovary, was about the size of a child's head. There were no adhesions. A pedicle was formed in the usual way, the peritoneum being stitched over it. The left ovary, which was hard and nodular, was also removed. A supplementary ligature was placed on the ovarian artery on both sides. The intestines and meso-colon were covered with nodular and flaky material. On removing the tumour the intestines were found pulled up almost out of the pelvis; in fact, they never appeared in the wound at all. No great omentum could be seen. On searching further up a hard mass was found about an inch and a-half wide, extending right across the abdomen just underneath the greater curvature of the stomach; this was evidently the omentum rolled up and hardened by inflammation. This I presume was caused by a rupture of one of the cysts of the ovarian tumour, which had caused some peritonitis, and also accounted for the enormous amount of thick fluid felt in the peritoneal cavity. The operation was performed on January 17th. The patient has progressed without a bad symptom, although there appears to be some re-collection of fluid in the peritoneum.

The minutes of the last meeting were read and confirmed.

BALLOT.

Hampden Carr, L.R.C.P. and S. Irel., was elected a member of the Branch.

PAPERS.

In the unavoidable absence of the author, the Honorary Secretary read Dr. J. C. Verco's paper, "Amoebic Pulmono-hepatic Abscess" (see p. 66). The discussion was adjourned till next meeting.

Dr. Cavenagh-Mainwaring read his paper on "A Case of Pulmonary Thrombosis Following Labour" (see p. 50). A discussion ensued, in which Drs. Giles, W. T. Hayward, W. A. Verco, Sweetapple, Lermite, and the President took part. Dr. Cavenagh-Mainwaring replied.

PROCEEDINGS OF OTHER SOCIETIES.

SYDNEY AND SUBURBAN PROVIDENT MEDICAL ASSOCIATION.

THE usual Quarterly Meeting of the above Association was held at 121 Bathurst-street, Sydney, on 10th January, 1899, at 8.30 p.m. Present: Drs. Hall, Abbott, West, Gill, Sinclair Gillies, Parker, Litchfield, Carruthers, Crago, Menzies, J. Adam Dick, and T. A. Green; E. H. Binney, hon. treas., and A. A. O'Hara, hon. sec.

Dr. W. A. West was voted to the chair.

The CHAIRMAN congratulated the Active Staff on the progress made by the Association during the last three months, which showed a large increase of members. Some alterations in the working of the Society had been made with satisfactory results. The dividend declared for the quarter, ending December 1898, was at the rate of 16s. per annum, which, though slightly below that declared at the last quarterly meeting, was, nevertheless, very satisfactory, and the probability was that this rate would be increased in the near future. He

begged to draw attention to the hard work and ceaseless vigilance exercised by the hon. secretary and hon. treasurer, the state of efficiency in which the Association at present stood being chiefly due to the efforts of those gentlemen. It was matter for regret that the Sydney and Suburban Provident Medical Association had its detractors, but he could testify to the good resulting from its progress, and that in the warmest terms. A class of patients which had for years past been in the habit of procuring medical aid gratis now contributed the amount in fees they were able to afford, and he might add that they were happy to do so, and would long ere this have paid their way in this respect had there been an organisation such as the Sydney and Suburban Provident Medical Association to encourage and offer the means for such laudable desire.

The HON. TREASURER made his financial statement, which was considered highly satisfactory. The sum remaining over after payment of the medical officers and chemists it was agreed should be deposited in the Savings Bank in liquidation of the loan fund.

Letter read by the Chairman from the hon. secretary of the Eastbourne Provident Medical Association, together with a printed statement of the position of that Association. The hon. secretary of the Eastbourne Association congratulated the Active Staff of the Sydney and Suburban Provident Medical Association on the establishment of a society on similar lines to those of his Association, and was happy to learn of the success of the undertaking.

Dr. J. ADAM DICK proposed a vote of thanks to the hon. secretary and hon. treasurer, which was seconded by Dr. GREEN, and carried by acclamation.

MEDICAL SOCIETY OF QUEENSLAND.

THE eleventh Annual Meeting was held on January 3rd, 1899, in the Society's rooms. Present: Dr. Wheeler (President), Drs. Love, Gibson, Carosso, Dixon, Francis, Hopkins, Scott, Clowes, and Turner.

J. A. Going, M.R.C.S. Eng., L.S.A. Lond., was elected to membership.

ELECTION OF TRUSTEES.

Drs. Gibson and Love were elected trustees.

ELECTION OF OFFICE-BEARERS FOR 1899.

Drs. Gibson and Clowes were appointed scrutineers, and declared the result of the ballot as follows:—President, David Hardie, M.D., C.M. Aberd. Vice-Presidents, G. H. Hopkins, L.R.C.P. Lond., F.R.C.S. Eng.; J. A. Wheeler, M.D., B.S. Lond., M.R.S.C. Eng. (*ex officio*). Treasurer, Peter Bancroft, M.B., Ch.B. Syd. Secretary, A. Jefferis Turner, M.D. Lond., M.R.C.S. Eng. Council, Wilton Love, M.B., C.M. Edin.; H. Alex. Francis, B.A., M.B., B.C. Cantab, L.R.C.P. Lond.; A. B. Carosso, M.B., C.M. Edin. Auditors, John Thomson, M.B., C.M. Edin.; W. S. Byrne, B.A., M.D., B.Ch. Dubl.

Dr. LOVE showed a new form of universal splint.

The HON. SECRETARY read the

REPORT OF COUNCIL.

The Eleventh Annual Report for the year 1898 is of a quiet and uneventful character. The near approach of the Intercolonial Medical Congress, to be held in the present year, to some extent has detracted from the interest of our meetings. Nevertheless, much instructive work has been brought forward for discussion, and many interesting cases and specimens exhibited. A list of the papers read is given below. To those who

have contributed to our proceedings the Council begs to tender its best thanks.

Four new members have been elected during the past year. We have to lament the death of three of our members: Dr. Scholes, one of our trustees; Dr. Margetta, one of the veteran practitioners of the colony; and Dr. Kent. One has resigned, and one has left the colony. Sixty-five members remain on the roll.

In conclusion, we would express a hope that all our members will co-operate in keeping up the level of our proceedings to that of the past, remembering that the success of our intercolonial congresses depends more on the vitality of our local medical societies than on any other factor.

On the motion of the PRESIDENT, seconded by Dr. GIBSON, the report was adopted.

The reading of the balance-sheet was deferred to next meeting.

The PRESIDENT then delivered his valedictory address: "On Certain Points in the Laws affecting Medical Practitioners in Queensland." (See p. 48.)

Dr. HOPKINS moved a vote of thanks to the President for his address, and that the secretary send a copy to the daily press. Dr. LOVE seconded, and Dr. GIBSON supported, the resolution, which was carried unanimously.

LIST OF PAPERS READ DURING 1898.

1. Presidential Address—Dr. Francis.
2. A Rare Form of Hepatic Cirrhosis—Dr. Turner.
3. Discussion on Dengue Fever.
4. Case of Double Lamellar Cataract—Dr. Gibson.
5. Case of Glaucoma induced by Dengue Fever—Dr. Gibson.
6. Case of Chronic Pleuritic Effusion—Dr. Carvosso.
7. Case of Nephrectomy—Dr. Hardie.
8. Case of Hysterectomy—Dr. Hardie.
9. Case of Splenectomy—Dr. H. C. Garde.
10. Hypertrophy of Thymus causing Pressure Symptoms—Dr. P. Dixon.
11. Case of Tabes Dorsalis, with Gastric Crises, &c.—Dr. Turner.
12. Four Cases of Nephro-lithotomy—Dr. Hopkins.

LIST OF MEMBERS.

Ashworth, L. N., B.A., M.B., B.S. Univ. Melb., Aramac.
 Bancroft, Peter, M.B., Ch.M. Univ. Sydney, Ann-street, Brisbane.
 Bell, H. T. S., L.R.C.P. Lond., F.R.C.S. Eng., Brisbane.
 Byrne, Wm. S., B.A., M.D., B.Ch. Dublin, Fortitude Valley, Brisbane.
 Cameron, J. Alex., M.B., B.O. Cantab., Ipswich.
 Carvosso, A. B., M.B., C.M. Edin., George-street, Brisbane.
 Chafflands, F., M.B., Ch.M. Univ. Sydney, Childers.
 Clatworthy, H., M.R.C.S. Eng., L.S.A. Lond., Charters Towers.
 Clowes, Joseph S., M.R.C.S. Eng., L.S.A. Lond., Albion, Brisbane.
 Cooper, Lillian Violet, L.R.C.P. and S. Edin., L.F.P.S. Glasgow, George-street, Brisbane.
 Ouplin, Millice, L.R.C.P. and S. Edin., L.S.A. Lond., Fortitude Valley, Brisbane.
 Davidson, G., M.R.C.S. Eng., L.R.C.P. Lond., Gayndah.
 Dennis, George E., M.B., B.S. Univ. Melb., Warwick.
 Dixon, G. P., M.B., Ch.M. Sydney, Children's Hospital, Brisbane.
 Flynn, John, L.R.C.P. and S. Edin., L.F.P.S. Glasgow, Ipswich.
 Francis, H. Alex., B.A., M.B., B.O. Cantab., M.R.C.S. Eng., L.R.C.P. Lond., Wickham-terrace, Brisbane.
 Freshney, R., M.B. Univ. Sydney, Toowoomba.
 Fullerton, A. Y., M.R.C.S. Eng., L.R.C.P. Lond., Dalby.
 Garde, Henry C., L.R.C.P., F.R.C.S. Edin., L.K.Q.C.P.I., Maryborough.
 Geddie, W. S., M.B., C.M. Aberdeen, Gympie.
 Gibson, J., Lookhart, M.D., C.M. Edin., M.R.C.S. Eng., Wickham-terrace, Brisbane.
 Going, J. A., M.R.C.S. Eng., L.S.A. Lond., Sherwood, Brisbane.
 Halford, A. O. F., M.B., B.S. Univ. Melb., Clermont.
 Hardie, David, M.D., C.M. Aberdeen, Wickham-terrace, Brisbane.
 Hare, Francis W. E., M.D. Durham, M.R.C.S. Eng., Charters Towers.
 Hewer, H. J., M.R.C.S. Eng., L.S.A. Lond., Blackall.
 Hill, James, M.D., L.R.C.P. Glasgow, F.R.C.S. Edin., Brisbane.
 Hirschfeld, Eugene, M.D. Strasburg, Wickham-terrace, Brisbane.
 Hopkins, G. H., L.R.C.P. Lond., F.R.C.S. Eng., North Quay, Brisbane.
 Hunt, J. Sydney, M.R.C.S. Eng., L.R.C.P. Edin., Hughenden.
 Kortum, Axel H. T. B., M.D., Ch.D. Berlin, Cooktown.
 Lauterer, Joseph, M.D. Freiburg, South Brisbane.
 Lossberg, W. H. von, M.D. Marburg and Würzburg, Ipswich.
 Love, Wilton W. R., M.B., Ch.M. Edin., Wickham-terrace, Brisbane.
 Macdonald, R., M.B., C.M. Glasgow, Ipswich.
 McDonnell, James J., M.D., Ch.M. Univ. Sydney, Toowoomba.
 McNeely, H., M.D., C.M. Glasgow, Bowen-terrace, Brisbane.
 Macnamara, Matthew, L.R.C.S.I., L.K.Q.C.P.I., Woolloongabba, Brisbane.

Moloney, Patrick J., L.R.O.S.I., L.K.Q.C.P.I., Fortitude Valley, Brisbane.

Morgan, Thos. Howard, M.D., C.M. Edin., F.R.O.S. Edin., Gympie.
 Murray, G. L., M.B., Ch.M. Sydney, Mt. Morgan.
 Nall, J. F., L.R.O.P. Lond., F.R.C.S. Eng., Clayfield, Brisbane.
 Nicol, Alex., M.D., C.M. Aberdeen, Tambo.
 Nicol, Jas. Robert, M.A., M.B., C.M. Aberdeen, Goodna.
 O'Doherty, Kevin I., F.R.C.S.I., L.K.Q.C.P.I., Brisbane.

O'Doherty, Edw. H., L.R.C.S.I., L.K.Q.C.P.I., Wickham-terrace, Brisbane.

Orr, A. W., M.D., B.Ch. Dublin, L.K.Q.C.P.I., Brisbane.
 Paul, Frederic, M.D. Brux., M.R.C.S. Eng., L.R.C.P. Lond., Sandgate.
 Penny, J. A. O., L.R.C.S.I., L.K.Q.C.P.I., Maryborough.
 Robertson, Wm. Nathaniel, M.B., C.M. Edin., Ipswich.
 Ryan, John Pannell, L.R.O.S.I., L.K.Q.C.P.I., Gympie.
 Sa'ter, A. R., M.B., C.M. Univ. Melb., Thursday Island.
 Scott, E. W. Kerr, M.B., C.M. Edin., Brunswick-street, Brisbane.
 Smith, Patrick, B.A., M.D. Univ. Sydney, Dunwich.

Sutton, Alfred, M.R.O.S. Eng., L.S.A. Lond., Beenleigh.

Taylor, Hon. Wm. Fred., M.D. Queen's Univ., Kingston, Canada; M.R.C.S. Eng., L.S.A. Lond., D.H.B. R.C.P. and S. Eng., Brisbane.

Thomas, W. D., M.B. Lond., M.R.C.S. Eng., L.S.A. Lond., Bundaberg.

Thomas, G. H. W., M.R.C.S. Eng., L.R.C.P. Lond., Mareeba.

Thomson, John, M.B., C.M. Edin., Wickham-terrace.

Tilley, Wm. J., M.R.C.S. Eng., L.R.C.P. Lond., Warwick.

Townley, P. L., M.B., Ch.M. Univ. Sydney, Murrumbidgee.

Turner, A. Jefferis, M.D. Lond., M.R.C.S. Eng., Wickham-terrace, Brisbane.

Ure, John, M.D. Erlangen, M.R.C.S. Eng., L.K.Q.C.P.I., George-street, Brisbane.

Webb, Wm. Simpson, M.R.C.S. Eng., L.R.C.P. Lond., South Brisbane.

Wheeler, Jas. Atkin, M.B., B.S. Lond., M.R.C.S. Eng., Toowoomba, Brisbane.

Wilkie, D. W. B., M.B. Univ. Melb., M.R.C.S. Eng., Burketown.

Wray, Chas. J. Hill, L.R.C.P. and S. Edin., Brisbane.

* Honorary Members.

EX-PRESIDENTS OF THE SOCIETY.

(12.)

1887. Joseph Bancroft, M.D. Univ. St. And.
 1888. Joseph Little, M.B. Univ. Edin.
 1889. John Thomson, M.B. Univ. Edin.
 1890. William S. Byrne, M.D., T.C.D.
 1891. William F. Taylor, M.L.C., M.D., Kingston, D.P.H.
 1892. John Lookhart Gibson, M.D. Univ. Edin.
 1893. David Hardie, M.B. Univ. Aberd.
 1894. Peter Bancroft, M.B. Univ. Sydney.
 1895. James Hill, M.D. Univ. Glas., F.R.C.S. Edin.
 1896. Wilton Love, M.B. Univ. Edin.
 1897. H. Alex. Francis, B.A., M.B. Univ. Cantab.
 1898. J. A. Wheeler, M.B., B.S. Univ. Lond.

REVIEW.

PRACTICAL URINALYSIS AND URINARY DIAGNOSIS: A MANUAL FOR THE USE OF PHYSICIANS, SURGEONS, AND STUDENTS. By Charles W. Purdy, M.D., LL.D. (Queen's University); Fellow of the Royal College of Physicians and Surgeons, Kingston; Professor of Clinical Medicine at the Chicago Post-Graduate Medical School. Fourth, revised edition. With numerous illustrations, including photo. engravings and coloured plates. The F. A. Davis Co., publishers, Philadelphia, New York, Chicago, 1898.

This is an excellent volume, entirely devoted to the practical analysis of the urine. It is divided into two parts, the first dealing with the analysis of urine, the second with urinary diagnosis. These are again subdivided into sections, of which there are eight in Part I, and three in Part II. There are also two Appendices—A, Examination of Urine for Life Assurance; and B, Reagents and Apparatus for Qualitative and Determinate Urinalysis.

Under Part I, are considered at length the composition, collection for analysis, physical characters, chemical reactions, &c., of normal urine, and the detection of sediments, &c., of abnormal urine. In this part are thirty-five good illustrations and seven coloured plates, which deserve considerable praise.

(For other Reviews see page 85.)

FOURTH ANNUAL REPORT OF THE NEW ZEALAND MEDICAL DEFENCE UNION.

Presented at the Annual Meeting, held at Auckland in January, 1899.

GENTLEMEN,

Christchurch, December 23rd, 1898.

A perusal of the Balance Sheet and of the Report shows that the position of the Defence Union is slowly improving. It is noticeable, however, that many members have not paid their subscriptions for the year. This may be owing to the smallness of the subscription (5s.). But it would be well for the subscribers to remember that the power of a union such as ours depends largely upon whether the members of the profession do or do not present a united front, and this they can best do by all being subscribers to the Defence Fund. I trust, however, now that attention has been again called to the subject, subscribers will forward their back dues, together with their 1899 subscription, as early as possible.

E. JENNINGS, President.

BALANCE SHEET OF THE NEW ZEALAND MEDICAL DEFENCE UNION FOR 1898.
(Limited by Guarantee.)

RECEIPTS.				EXPENDITURE.			
			£ s. d.			£ s. d.	£ s. d.
Balance in Union Bank at last Audit	..	..	38 10 9	Secretarial Expenses—			
Subscriptions during 1898	..	..	20 0 0	Stamps	..	0 14 0	
				Typewriting	..	0 3 0	
				Half Cost of Printing Post Cards, as per			
				Crook's Account	..	0 6 0	
				Half Cost of Printing Reports, Stationery,			
				&c., as per Crook's Account	..	3 10 0	
				Exchange on Cheques	..	0 5 0	
							4 18 0
				Bank Charge for Keeping Account	..		0 10 6
				Balance in Union Bank of Australia	..		51 2 3
			£56 10 9				£56 10 9

Audited and found correct.

December 23rd, 1898.

WALTER THOMAS.

FOURTH ANNUAL REPORT OF THE NEW ZEALAND MEDICAL BENEVOLENT FUND.

Presented at the Annual Meeting, held at Auckland immediately after the Medical Society's Meeting in January, 1899.

GENTLEMEN,

Christchurch, December 24th, 1898.

The Fourth Report of the New Zealand Medical Benevolent Fund reveals an unexpected indifference to its advantages, no fewer than fourteen of last year's subscribers having failed to pay their subscriptions for 1898. It is surely unnecessary to insist upon the expediency of supporting such a fund, nor of pointing out the practical benefit members of the profession (or their widows and families) have derived from similar organisations elsewhere.

The Committee desires to make a strong appeal to members to support the fund, both by paying their subscriptions and by inducing others to join.

The amount already funded (£200), at the low rate of interest prevailing at present, brings in £6 per annum; another £100 will be funded in the course of a few days. It is evident that with a few more years of similar development the Fund will be sufficient to be of practical use.

We would again draw attention to the advantages of the payment by members of the sum of £10, giving life membership; for if twenty more members will do this another £200 can be invested, thereby making our fixed deposits reach £500, a sum which would return a substantial amount yearly.

E. JENNINGS, President.

BALANCE SHEET OF THE NEW ZEALAND MEDICAL BENEVOLENT FUND FOR 1898.

RECEIPTS.				EXPENDITURE.			
			£ s. d.			£ s. d.	£ s. d.
Balance in Union Bank of Australia at last Audit	..	..	44 3 6	Secretary's Expenses—			
Secretary's hands at the same time	..	..	2 11 0	Exchange on Cheques	..	0 4 0	
Interest of £100 on Deposit in Union Bank of Australia	..	..	3 0 0	Stamps	..	0 14 0	
Subscriptions received in 1898	..	..	56 7 0	Half Cost of Post Cards, as per Mr. Crook's			
				Account	..	0 6 6	
				Half Cost of Printing Report and Sta-			
				tionery, as per Account	..	3 10 0	
							4 14 6
				Bank Charge for Keeping Account	..		0 10 6
				Balance in U.B.A.	..		100 16 6
			£106 1 6				£106 1 6

Audited and found correct.

December 23rd, 1898.

W. THOMAS.

EXTRACTS FROM FOREIGN MEDICAL LITERATURE.

BY WALTER SPENCER, M.D., ENMORE, N.S.W.

LE NORD MEDICAL, Lille, Sept. 1, reports that a proposal is before the French Chamber of Deputies to punish women who may be convicted of *abortion* or infanticide by a new form of hard labour, *i.e.*, compulsory child-bearing. They would be deported to a penal settlement for the purpose of colonising it with one, two or three infants, according to the sentence. It has not yet been suggested that the awful prevalence of abortion in Sydney and suburbs might be abated by this method of making "the punishment fit the crime."

In the issue of Oct. 15, Professor Lemoine, treating of *Chronic Nephritis*, says:—"If a subject of Bright's disease passes one to two grams of albumen during 24 hours without high arterial tension, and seems in other respects to enjoy fair health, prescribe *Lactate of Strontium*, one or two grams a day, and you will find the albumen diminish by one-half."

Janus, Amsterdam, August, contains the summary of Dutch researches on *Beri-Beri*, which was noticed in the *British Medical Journal*, Sept. 24. The inference is that the pericarp of rice contains a substance which has a curative action, especially in the early stage of *Beri-Beri*. Both the pathological anomalies and the clinical symptoms of this disease point to an infective origin, hence its specific cause is believed to be microbial.

Gazette de Gynecologie, Paris, Oct. 15.—Dr. Livet relates the good effect in treatment of Cancer of the Uterus and Vagina by Carbide of Calcium. It arrests hæmorrhages and discharges, deodorises fætor, and soothes pain. In contact with the genital fluids, it gives off acetylene. On removal of the tampon an eschar is revealed, covering over the granulations which are much reduced in size. Acetylene does no harm even if it pass into the Fallopian tubes and peritoneum; it is absorbed, carried into the circulation, and excreted by the kidneys. Healthy tissues are not affected by the application.

Annales de Medicine et de Chirurgie Infantiles, Paris, Oct. 1.—Dr. Redard's paper on "Coxalgia" is illustrated by some excellent radiographs, which display—(I.) Synovial Lesions in incipient Coxalgia at one month. (II.) Delayed consolidation in an Epiphysis. (III.) Deformity and subluxation of head of femur, with atrophy of the shaft, six months. (IV.) Old Coxalgia. Lesions of Cotyloid cavity and of the head of femur, fibroid ankylosis, etc.

GF Incurabili, Naples, Aug. 15.—Dr. R. Greco publishes a series of experiments on the physiological action of Sulphate of Nickel, reviewing the work of Rabuteau, Simpson, Anderson Stuart, Coppola, Japelli, and Fede. He confirms the conclusions of Anderson Stuart (impugned by Coppola) that both the convulsive and paralytic effects on voluntary muscle are of central (bulbar) origin, as well as the opinion of Japelli that the drug is contra-indicated in cases of cerebral congestion.

THE ANNUAL REPORT ON INSANITY IN NEW SOUTH WALES.

THE report of the Inspector-General of the Insane (Dr. Eric Sinclair) for the year ending 31st December, 1897, has been presented to Parliament. The number of insane persons under official cognisance was stated to be 3,957, an increase of 112 in the year 1897, made up of 52 males and 60 females. This increase, says the inspector, is considerably less than has been customary during the past few years, and approaches

more the average of twenty years. From 1872 to 1891 inclusive, the proportion of insane to population, though varying slightly from year to year, remained practically stationary; but the six years, 1892 to 1897 inclusive, have added 823, or an average of 137 annually, to the number of insane persons under care. The proportion of insane to population, which at the end of 1891 was 1 in 371, or 2.69 per 1,000, was at the close of 1897 1 in 334, or 2.99 per 1,000. This compares favourably with other countries, the proportions being—for Great Britain, 1 in 308, or 3.24 per 1,000; for Victoria, 1 in 271, or 3.69 per 1,000; and for Queensland, 1 in 321, or 3.10 per 1,000. Of the total number of insane persons on the register at the close of the year, 3,841 were in the hospitals and licensed houses in this colony, 110 were absent on leave under the provisions of the Lunacy Act, and 6 were in hospitals for the insane in South Australia under the provisions of the Lunacy Convention Act of 1894. The number of patients admitted during the year was 692—401 males and 291 females; less than had obtained for several years past. The number of admissions of late years had always exceeded 700 (during 1896 there were 740); and it may be that the reduced number is due to the improvement in the general condition of the colony and the recovery from the financial depression which undoubtedly was the cause of a large number of cases of insanity. The ratio of admissions to the general population of the colony—"occurring insanity"—was 1 in 1,912, a better proportion than last year, and worthy of note as showing that the actual proportion of insanity to the population is not really increasing, although the number in the various hospitals may be. The number of patients discharged during the year was 327, and of these 287 were reported as recovered, and 40 as relieved. The recoveries gave a percentage of 41.47, and the cases relieved a percentage of 5.78 on the admissions—a rather smaller recovery rate than had been found in the last few years. The deaths numbered 249, and the percentage on the daily average number resident was 6.51. The causes of death were 134 due to diseases of the brain. The other deaths were due to various bodily diseases, consumption and heart disease being with old age the most common. One death from accident and one from suicide occurred during the year—a very satisfactory result when the large number of dangerous and suicidal patients under treatment in the various hospitals was considered. The suicide occurred at Gladesville Hospital, and was the subject of an inquest, at which a verdict was returned that all proper precautions had been taken with regard to the care of the patient. The fatal accident occurred at Kenmore, and was the result of snake-bite.

LETTER TO THE EDITOR.

A DISCLAIMER.

(To the Editor of the Australasian Medical Gazette.)

SIR,—I observe in to-day's *Herald* the following advertisement:—"Littlejohn's Antibilious Powder (popular headache rem.) wants few Agents. 63 B'water-road, D'hst."

As the address given is in my immediate neighbourhood, I beg to state that I am in no way whatsoever connected with either the advertisement or the powder.

Yours faithfully,

E. S. LITTLEJOHN.

94 Darlinghurst-road, Sydney,
February 3rd, 1899.

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

The Australasian Medical Gazette and the British Medical Journal are supplied to all Financial Members of the New South Wales, South Australian, and Victorian Branches Free of Cost.

Subscriptions (£2 2s. per annum) should be forwarded to the respective Branch Treasurers as below:—

New South Wales, Dr. Crago, 18 College Street, Sydney; South Australia, Dr. T. W. Corbin, Adelaide; Victoria, Dr. J. R. M. Thomson, Essendon, Victoria.

The Gazette is supplied to Members of the New Zealand and Queensland Branches by special arrangement with the local Secretaries.

SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

EDITOR'S LIBRARY.

THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
R. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A.; AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH FEBRUARY, 1899.

EDITORIAL.

ARE COLONIAL PUBLIC HOSPITALS CHARITABLE INSTITUTIONS?

THIS is a very vexed question, to which allusion has frequently been made in this *Gazette* under the heading of "Hospital Abuse," (see vol. xvii., 1898, pp. 83 and 365; also, "The Hospital Saturday in Sydney," p. 363) in which we indicated a very serious evil likely to arise from the "Industrial Fund" of this so-called charitable movement. We said:—

"It appears that the two principal sources from which the Hospital Saturday collections are augmented arise from the street canvass for donations and regular weekly contributions from the employees of some large business houses. The money raised by this latter way is called the 'Industrial Fund.' It is with regard to this fund that some trouble of 'the bread upon the waters' principle arises. According to the last annual report of the Hospital Saturday Fund Committee, this 'Industrial Fund' has £1,033 to its credit, that is about one-third the whole amount raised from both sources. The subscribers are persons in receipt of small salaries or wages, and they maintain that in making a weekly contribution toward hospital maintenance they are entitled to gratuitous hospital relief when required, and are supported in their demand by the committee of the 'Hospital Saturday Fund,' which adopted the following resolution:—'That grants made to any hospital should be conditional on any certified subscriber to this fund who is recommended for admission by the honorary secretary (or other honorary officer) being received and treated without any stipulation for payment, provided he or she is a fit subject for treatment and there is an available bed.'"

Upon a par with this, but somewhat intensified, is the following announcement, published in a circular by the local Hospital Secretary in a town called Bulong, in Western Australia:—

BULONG HOSPITAL.

All New Arrivals, Miners, Wage-earners, and others, are eligible to enter their names on the

Bulong Hospital Fund,

WHICH SECURES

MEDICAL ATTENDANCE AND MEDICINES

FOR

ONE SHILLING PER WEEK.

Every Subscriber of ONE SHILLING PER WEEK is entitled to:—

1. Free admission into the Hospital, and medical attendance.
2. Treatment as an out-door patient.
3. If so desired, or if unable to be removed to the Hospital, medical attendance at his own Camp, if such Camp is within a radius of one and a-quarter (1¼) miles from the boundary of the Municipality of Bulong.

MARRIED PERSONS who both subscribe **ONE SHILLING PER WEEK** receive the above benefits for themselves and for their children up to the age of fourteen (14) years.

The Secretary will visit the New Lead Mines and other places from time to time, where Subscribers and intending Subscribers may communicate with him, or at his office at the Hospital, which is open daily (including Sundays) from 8 a.m. till 10 p.m.

WHITWORTH GUNN, Secretary.

A medical correspondent, writing from this place, says of this newly-inspired hospital movement:—

"Already it has extended into several towns, ruined several local Friendly Societies, and chased elsewhere not a few medical men who had come from the eastern colonies, at great expense and loss to themselves, in expectation of entering into private practice, as well as conducting the management of some local hospital. At these places private practice has been obliterated, except on the occasion of a rush, when many strangers, ignorant of this pauperising free list, come to town. All the storekeepers, bank managers, clerks, merchants and miners pay into the 'Fund,' which is subsidised by the Government on the £ per £ principle. These the hospital doctor has to attend, either at the hospital or at their own homes, without payment. Therefore the advertisements inserted when a doctor is required are misleading, especially when the inducement of 'private practice allowed' is held out."

This gross perversion of the proper functions of an hospital is but an exaggeration of the abuse which pervades all the public hospitals in these colonies, and our only hope is that when a climax like this shall be reached in the older colonies that proper steps will be taken promptly to counteract the evil, or to blot out such institutions.

It was only last February, 1898, that Dr. Foreman raised the question of hospital abuse at a meeting of the Directors of the Sydney Hospital, and pointed out that patients were admitted who had no right to enter the institution; those came there who were well able to pay for medical advice. He condemned the system of hospitals accepting payment for patients as the curse of the medical world, and stigmatised the Sydney Hospital as being practically a vast provident dispensary, competing with the medical profession. If a candidate for admission proffered £1 per week no question was asked; and if another promised £2 a week he was welcomed with open arms. The hospital was built for the indigent sick, and anyone who came there and was ready to pay £2 or £1 per week was robbing someone out-

side—a proper recipient for charity—who had a right to a bed. He concluded by saying that the out-patient department was also very grossly abused. He moved that a sub-committee of the Hospital Board be appointed to remedy this evil.

The Hon. Dr. Mackellar said that the matter had been investigated years ago. It was found that they had treated as paupers persons who had thousands of pounds. He supported the motion of a conference on the subject, which might be productive of much good. In his opinion it was unjust and degrading to the hospital to ask a poor person for a shilling.

The President (the Hon. Sir A. Renwick) pleaded that the House Committee had quite sufficient work without having to inquire into this matter. It was no doubt very important, but the difficulty was how to deal with it.

The motion, "That a sub-committee of the Board be appointed to deal with the question of the admission of patients to the hospital, and also of those who are admitted to the out-door department," was put to the meeting, and lost on the show of hands. And thus the most vital question—that all-important one regarding the proper distribution of relief by a charitable institution known as the Sydney Hospital—was shelved. The question arises, Is the Sydney Hospital a charitable institution? Have we any evidence that it is such? Should its Directors canvass for subscriptions on the plea that it is a charitable institution? The action of the majority of the Directors seems to indicate that they prefer to conduct the institution on the principles of a vast provident medical institution, and thereby enter into competition with all the Friendly and Provident Societies in New South Wales. They may possibly at an early date consider it expedient to follow on with the Bulong Hospital one shilling a week business.

Similar criticism may be directed against the management of the Prince Alfred Hospital, Sydney, with its paying wards, in which gentlemen of means, officers of the navy, and Royal marines are admitted for a fixed sum per week—which includes medical and surgical attendance and operations. If the Prince Alfred Hospital poses as a charitable institution, why humiliate gentlemen holding Her Majesty's commissions by passively permitting them to accept the partial charity represented by their inadequate payment for medical and surgical assistance rendered. We might well ask: How many of the indigent sick and maimed have been turned away from its doors on the plea that there was no room for them, while these wards were filled with paying patients, whose

means would have permitted them to have paid for attendance outside?

Similar abuses to those of which we complain exist in those public hospitals throughout the colonies where payment or part payment by patients is accepted, or where the pay ward system exists. In all cities of the colonies there are now private hospitals under competent management, fully capable of dealing with patients able to pay moderate fees, and why should palatial hospitals, erected at public expense, soliciting contributions from the public on the plea of being charities, and endowed by Governments, enter into a commercial speculation and compete with such useful safeguards against pauperising the communities wherein they exist?

We maintain that those hospitals which do not take reasonable precautions against supplying medical and surgical assistance and indoor relief to impostors and to unsuitable subjects are fraudulently misappropriating the funds supplied to them by a charitable public, and subsidised by a confiding Government. It is the duty of such hospitals to organise a special staff of enquirers, who will make efficient investigation regarding the means and local condition of every person who claims hospital relief. Let poverty and inability to pay for outside medical attendance be the sole qualification for admission to or attendance at an hospital.

Under these conditions will a public hospital establish its claim to be regarded as a charitable institution, and to such will the public freely subscribe.

Should a public hospital charge an admission fee, or a weekly payment, no matter how small, then it loses its charitable aspect—becomes a vehicle for mercantile speculation, should be viewed with suspicion, and subscriptions withheld.

INTERCOLONIAL MEDICAL CONGRESS OF AUSTRALASIA.

BRISBANE, QUEENSLAND, 1899.

THE fifth session of the Intercolonial Medical Congress will be held in Brisbane during the winter months of 1899 (exact date not yet fixed).

The following gentlemen have kindly consented to act in their respective colonies as local secretaries:—South Australia, Benjamin Poulton, M.D., M.R.C.S., North Terrace, Adelaide; Victoria, Geo. Adlington Syme, M.B., F.R.C.S., Collins Street East, Melbourne; New South Wales, Philip Ed. Muskett, L.R.C.S., L.R.C.P., Elizabeth Street, Sydney; New Zealand, Professor John H. Scott, M.D., The University, Dunedin; Tasmania, Gregory Sprott, M.B., General Hospital, Hobart; West Australia, Athelstane J. H. Saw, M.B. Cantab., St. George's Terrace, Perth.

LETTERS TO THE EDITOR.

A WARNING.

(To the Editor of the *Australasian Medical Gazette*.)

SIR,—Allow me through your columns to warn such of your readers as have still some lingering traces of self-respect, personal and professional honour, to be very cautious in accepting appointments upon any of the great West Australian timber stations. Let them first make inquiries amongst their own friends in that colony. But especially let them not be led astray by any plausible statements proceeding from the managers of the M. C. Davies Co., Limited, of Karridale. Having had some personal experience of the Karridale Estate I speak from what I know, but this is not the place to enter further into the matter.

I am, yours faithfully

EDWARD MINCHIN,
B.A. Dub., L.R.C.S.I., L.R.C.P.I.

Pt. Wakefield, S.A.,
18th January, 1899.

A DISPUTED QUESTION IN THE SALE OF A MEDICAL PRACTICE.

The following problem has been submitted for our consideration by a medical gentleman resident in Victoria:—

(To the Editor of the *Australasian Medical Gazette*.)

Dr. Z was Health Officer and Public Vaccinator for 1897, and up to the date of his death in January, 1898.

A was appointed Health Officer in February, 1898. He then applied to the Central Board of Health for the post of Public Vaccinator, and was appointed in the middle of March, 1898.

B bought A's practice on the cash receipts for 1897, and took it over on the 1st March, 1898, acting nominally as A's *locum tenens* for six months. At the end of this time A resigned, and B applied amongst others and was elected as Health Officer. He subsequently applied to the Central Board of Health for the Public Vaccinatorship, and got it also.

Can A include the incomes from these appointments earned by Z in his cash receipts for 1897 on the grounds that it was owing to the fact that he got the Health Officership in February, 1898 (*vice* Dr. Z, deceased), that B got the appointments when A resigned six months later, notwithstanding the fact that Dr. Z was both Health Officer and Public Vaccinator for 1897, and actually received the salary for both appointments for that year?

"EAGLEHAWK."

[This problem hinges upon a clear definition of what is meant by "the cash receipts of 1897." The question arises: Was it definitely understood what the cash receipts should form the basis of agreement:—1st. To be those of Dr. Z's practice? Or, 2nd., To be those of Dr. A's practice? There seems to be no connection between Dr. Z and Dr. A except that Dr. A succeeded Dr. Z as Health Officer and Public Vaccinator, being appointed by the Board of Health. When A sold his practice to B, B succeeded to these emoluments by being appointed by the Board of Health from a number of other candidates. In making the basis of calculation of income that of 1897, we cannot see why the emoluments earned solely by Dr. Z, and not by Dr. A, should be included.—ED. A.M.G.]

EXAMINATION OF URINE IN INSURANCE CASES.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Dr. Faithfull says the female applicant is to pass urine in the examiner's consulting room, "to avoid the substitution of urine."

Dr. Faithfull shows the applicant the necessary article into which she is to pass her urine, and then "leaves her," and sees no more of her.

What is to prevent the applicant bringing a bottleful of somebody else's urine in her pocket and leaving the contents thereof in the indicated necessary article?

I am, yours truly,
FRANCIS PAIN.

Allora, Q., January 28th, 1899.

LONDON LETTER.

DEATH OF SIR WILLIAM JENNER—PREVENTION OF TUBERCULOSIS—SURGERY IN THE LATE SPANISH-AMERICAN WAR.

By the death of Sir William Jenner, at the age of 83, the medical profession in England has lost one of its most brilliant members. In consequence of ill-health he retired from practice in 1889, and from his appointment as Physician in Ordinary to Her Majesty in 1893; and since had been living in quiet retirement. He was educated at University College, London, and in 1848 became Professor of Pathological Anatomy in University College, and Assistant Physician to the Hospital. He was one of the first Physicians to the Sick Children's Hospital, in Great Ormond Street, which was established in 1852, and continued to hold that post till 1862, when he was appointed Physician in Ordinary to Her Majesty. He was for several years Physician to the London Fever Hospital, and it was during that time that he published his well-known researches on the differentiation of Typhoid and Typhus Fevers. He was one of the physicians in attendance on the Prince Consort in his last illness, and also attended the Prince of Wales in his severe illness, in 1872. His opposition to Homeopathy was shown by his refusing to meet Dr. Kidd in consultation on the late Earl of Beaconsfield. Sir William was paid a unique compliment by Her Majesty, who alluded in public to distinguished services when she laid the foundation stone of the Examination Hall of the Royal Colleges of Physicians and Surgeons on the Embankment, in 1886. He married, in 1868, a lady who had been suffering from an apparently incurable attack of chorea, but who speedily recovered under his treatment. He had outlived nearly all his distinguished contemporaries, Sir Russell Reynolds and Sir Richard Quain having not long predeceased him.

The prevention of tuberculosis is a subject which is engaging a considerable amount of attention at the present time. A short time ago a National Association for the prevention of Consumption and other forms of tuberculosis was formed, and a private meeting is to be held at Marlborough House under the presidency of H.R.H. the Prince of Wales to promote the objects of the Association. The recent Harben lectures, by Sir Thorne Thorne, on the Administrative Control of tuberculosis, and other addresses, have emphasized the great importance of strict supervision of meat and milk supplies as preventive measures, and the first importance of climatic and open air treatment for those who have become infected with the disease.

In the recent Spanish-American war some of the American soldiers are reported to have had remarkable recoveries from severe bullet wounds. In one case a bullet entered behind the ear and came out near the spine, but though rather severe hæmorrhage occurred, the man was about again in a week. Several men shot through the abdomen by Mauser bullets walked four miles to hospital, and arrived in good condition, recovering after very little pain, and without operation. All the treatment that was given to them was that they were sent to lie down and not allowed to take any food, except perhaps a little beef tea for twenty-four hours. Nearly all the men returned to service, and no case of tetanus or gangrene occurred. The surgeons attributed these results to the fact that the men fought on empty stomachs at the battle on July 1st.

I am indebted to the *Daily Chronicle* for the following:—"A certain professor, a leading light of his University, recently wrote on a blackboard in his laboratory, 'Professor'—informs his students that he has this day been appointed Honorary Physician to the Queen.' In the course of the morning he had occasion to leave the room, and on returning found that a student had added the words, 'God Save the Queen.'"

PUBLIC HEALTH.

At the last meeting of the Launceston (Tas.) Hospital Board, it was stated the necessity of having isolation wards was evidenced by the fact that the wards had been full ever since they were ready for use.

A conference of representatives of the Central and Local Boards of Health of Hobart and suburbs has been held to take into consideration the question of establishing an Infectious Diseases Hospital. For some years past the General Hospital has provided isolation wards, but owing to a sparsity of room the Board of Management has decided that in future no infectious diseases will be admitted.

At the conference called by request of the Mayor of Hobart, a lengthy report by the City Health Officer was read, pointing out the advantages of having accommodation in readiness in the event of an epidemic disease being introduced. The members of the conference were unanimously of opinion that such a hospital was necessary, and it was decided that a deputation should wait upon the Government with a request that the Central Authorities might take the matter into consideration. The Premier, who received the deputation, requested the Chairman and the Mayor to place their views in writing. Subsequently the Mayor requested the Hospital Board to reconsider their decision, and set apart temporary accommodation until some permanent arrangements could be made. A special meeting of the Hospital Board was held on the 30th ult. to consider the Mayor's request, but it was unanimously decided—"That this Board regrets it cannot consent to the General Hospital being used as an infectious diseases hospital to a greater extent than now, with typhoid and diphtheria cases; there are neither wards nor necessities available for the proper isolation of scarlatina cases." It has not been decided what further action will be taken, but the matter will not be allowed to rest, and it is anticipated that the local Boards of Health will require to combine, as suggested by the Hobart Health Officer, and provide the necessary accommodation for themselves, the Government assisting these authorities with a substantial subsidy.

Dr. Sprott (Officer of Health) reports that during the month of December there were 48 deaths registered in the registration district of Hobart, but two of these

were of persons not usually resident in the district. In the city there were 27 deaths, as compared with 42 for the corresponding month of last year. The death-rate equals 10·80 per 1,000 per annum, and the principal causes were:—Cancer, 2; phthisis, 3; old age, 4; pneumonia, 3; enteritis, 3; peritonitis, 2; debility, 3; and the remainder were of a general nature. Ages at death—Under 1 year, 8; between 1 and 5 years, 2; between 5 and 65 years, 9; and over 65 years, 8. The total number of births registered was 60; in the city, 44—males, 23; females, 21.

VITAL STATISTICS.

SYDNEY.—There were 908 births and 520 deaths registered in Sydney during December. The principal causes of death were:—Measles, 5; typhoid fever 6; bronchitis, 10; pneumonia, 23; cancer, 24; phthisis, 31; whooping cough, 71. There were 12 suicides.

MELBOURNE.—The chief causes of death in greater Melbourne during December were as follows:—Measles, 3; diphtheria, 50; cancer, 40; phthisis, 59; whooping cough, 28; bronchitis, 9; typhoid fever, 12; pneumonia, 38. There were in all 849 births and 774 deaths registered during the month.

BALLARAT.—There were 3 deaths from whooping cough, 4 from cancer, 8 from phthisis, and 11 from pneumonia during the month of December.

ADELAIDE.—There were 78 births and 119 deaths in Adelaide during November. The principal causes of death were:—Measles, 5; whooping cough, 6; cancer, 3; phthisis, 7; old age, 7; pneumonia, 6; diarrhoea, 10; enteritis, 7.

NEW ZEALAND.—In the four boroughs of Auckland, Wellington, Christchurch, and Dunedin there were, during December, 7 deaths from measles, 2 from typhoid fever, 12 from cancer, 21 from phthisis, 5 from bronchitis, and 5 from pneumonia.

BRISBANE.—During the month of December there were 3 deaths from measles, 10 from scarlet fever, 6 from typhoid fever, 3 from whooping cough, 1 from diphtheria, 4 from cancer, 4 from phthisis, and 9 from pneumonia.

HOBART AND LAUNCESTON, TAS.—The Government Statistician's report on vital statistics of the Hobart and Launceston registration districts for the year 1898 shows that during the year 1,404 births—723 males and 681 females—were registered in the registration districts of Hobart and Launceston. This is 65 less than in the corresponding month last year; and a decrease of 240·8 as compared with the average of the births registered in the last five-yearly period. To every 1,000 of the population of the two districts the proportions of births registered were as follow:—For Hobart, 21·53; for Launceston, 21·56; all, 37·32. Deaths—The deaths registered in 1898 in Hobart and Launceston numbered 1,112—631 males and 481 females; 415 deaths, or 37·32 per cent. of the whole, took place in public institutions. The total number of deaths registered in the two districts during 1898 is 137 more than in last year, and shows an increase of 98 as compared with the average number of deaths registered in the last five-yearly period. To every 1,000 of the population of the respective divisions the proportions of deaths registered were as follow:—Hobart, 16·03; Launceston, 18·69; all, 17·06. The deaths under 5 years of age numbered 305, or 27·43 per cent., of which 229 were under 1 year of age; the deaths between 5 and 65 years of age numbered 408, or 36·69 per cent.; and the deaths 65 years and upwards numbered 399, or 35·88 per cent.

UNIVERSITY NOTES.

UNIVERSITY OF SYDNEY.

At the last meeting of the Senate, Hon. Dr. McLaurin, the Chancellor, presiding, the following were admitted to the degree of M.B.:—Blackburn, C. B.; Brennand, H. J. W.; Cargill, W. D.; Fairfax, E. W.; Ludowick, E.; M'Master, E. A. D.; Magarey, F. W. A.; Sandes, F. P.; Wilson, T. G.

HOSPITAL INTELLIGENCE.

LAUNCESTON.

At the January monthly meeting of the Hospital Board the question of an honorary staff was again introduced.

Mr. R. L. Parker moved, and Dr. Thompson seconded,—"That the Surgeon-superintendent be instructed to set apart beds in the hospital for use of patients nominated by the honorary consulting surgeons when the state of the hospital admits, and who shall have medical and surgical charge of such patients, subject to the right of the Surgeon-superintendent, or in his absence of the House Surgeon, to prescribe for and attend to such patients whenever they shall consider it necessary in the interests of the patients so to do."

After a somewhat lengthy discussion, the following amendment was moved by Mr. W. Perrin, and seconded by Mr. H. Edgell,—"That a conference be held between the hospital officers and the honorary consulting surgeons, in order to ascertain views of the latter so as to deepen their interest in the hospital without interfering with the present system of management, and that the Chairman of the Board, Vice-chairman, Mr. Parker, and Surgeon-superintendent be requested to meet and confer with the honorary surgeons, and report to the Board."

The amendment was carried, and the Chairman promised the conference would be held at the earliest possible date.

It is very evident, however, from the diversity of opinion, and the bitter feeling that has been created between the Launceston Medical Association and the Hospital Board, that nothing will be done until Parliament intervenes by an alteration in the constitution of the hospital management. It is understood that the Premier will deal with the matter so soon as the Medical Association places its views in writing. The principal feature in the reform desired by the medical men of Launceston is the establishment of an honorary medical staff, and this is just what the Board objects to.

HOBART.

The cash collections for the year 1898 amounted to £822 9s. 3d., being an increase of £67 19s. 10d. as compared with 1897. The expenditure for 1898 was exceptionally large, and on the 31st December a debit balance remained of £666 18s. 9d. The Chairman at the last monthly meeting was requested to interview the Chief Secretary with a view to having the amount squared up.

MEDICAL NOTES.

MEDICAL MAGISTRATES.—The following gentlemen have been appointed magistrates for their respective colonies:—Dr. G. V. Gilray, of Nyngan, N.S.W.; Dr. R. H. Todd, of Sydney, Dr. Donald Luker, J.P., has been appointed Deputy Licensing Magistrate of the Licensing Court for the licensing District of Brewarrina, N.S.W.

MILITARY INTELLIGENCE.

NEW SOUTH WALES.—The following appointment has been gazetted: *New South Wales Army Medical Corps (Volunteer Establishment)*—Edward Patrick McDonnell, gentleman, L.R.C.S. Irel., L.K.Q.C.P. Irel., to be Lieutenant.

VICTORIA.—The following appointment and confirmations are announced: *Medical Staff, Militia*—Major Charles Snodgrass Ryan to be Lieutenant-Colonel, supernumerary to the fixed establishment, pending absorption. Confirmation of commissions, *Reserve of Officers, Medical Staff, Militia*—Captain William Christian Daish; Captain James William Moon Buick.

OBITUARY.

CHARLES HEDLEY, M.B. & Ch.B. Melb. 1883, died on January 21st at Grafton, N.S.W. Dr. Hedley, who was Government Medical Officer for the district, had practised in Grafton for about six years. He had been ill for some considerable time. The deceased was an ardent sportsman, and for several years acted as starter to the Clarence River Jockey Club. He was the inventor of the electric starting gate.

ALLEN BRADLEY MORGAN, M.B.C.S. Eng. 1885, L.R.C.P. Edin. 1869, died at Bowral, N.S.W., on January 24th. Dr. Morgan, who was a colonist of forty-three years' standing, had retired from practice for some time.

ALEXANDER SKINNER, L.F.P.S. Glas. 1833, who arrived in New South Wales sixty years ago, died at his station, "Airlie Brake," near Inverell, N.S.W., on January 18th. Dr. Skinner was the oldest medical practitioner in the colony, having been registered on April 7th, 1839. He was 88 years of age.

CHANGE OF ADDRESS, ETC.

BROWNE, Dr. HAROLD, late of Molong, has recommenced practice at Summer Hill, near Sydney, after an absence of six years.

BRUCE, Dr. C. W., of Melbourne, has succeeded to Dr. Waugh's practice at Narrandera, N.S.W.

GORRINGE, Dr. C. J., a recent arrival, has commenced practice at Kempton, Tas.

GREEN, Dr. T. A., has removed from College-street, Sydney, to Botany, near Sydney.

HEPWORTH, Dr. A. F., has removed from Yarrawonga to Tungamah, Vic.

KATER, Dr. N. W., late of Prince Alfred Hospital, has left for London.

MACPHERSON, Dr. JOHN, recently of Prince Alfred Hospital, Sydney, has commenced practice at Hill Crest, Macquarie-street, Glen Innes, N.S.W.

MAW, Dr. H. S., of Tumbarumba, has removed to the Hospital, Albury, N.S.W.

NICOLL, Dr. ALEXANDER, late of Tambo, Q., has gone to Dunwich, Q.

FORBITT, Dr. E. E., a recent arrival, has commenced practice at Greytown, N.Z.

ROBINSON, Dr. LEONARD, formerly of Hamilton, Vic., has purchased the practice of Dr. C. G. Thorp, of Gladstone, Q.

VEKCH, Dr. M., has succeeded to Dr. H. Browne's practice at Molong, N.S.W.

WILKIE, Dr. W. B., has removed from Thornborough to Burketown, on the Gulf of Carpentaria, Q.

CORRECTION.—ORCHARD, Dr. W. H. (instead of Blackburne, Dr. G. N. S., as stated in our January issue), has commenced practice at White Cliffs in conjunction with Dr. Atkins, of Wilcannia, N.S.W.

MEDICO-LEGAL.

HIS Excellency the Governor of New South Wales, with the advice of the Executive Council, and upon the recommendation of the Public Service Board, has been pleased to appoint Robert Henry Todd, Esquire, B.A., M.D. Dub., F.R.C.S. Irel., Barrister-at-law, to be Deputy City Coroner of Sydney, *vice* Dr. G. K. Rennie, resigned.

MEDICAL APPOINTMENTS.

The following medical appointments are announced:—

Barker, W. H., M.R.C.S. Eng., &c., to be Acting Medical Superintendent, Ararat Lunatic Asylum, *vice* Dr. W. B. Smith, transferred.

Bennett, F. G., L.R.C.P. &c., to be Acting Officer of Health for Alberton Shire, Vic., during the absence of Dr. L. L. Birch.

Coane, James, L.R.C.S., &c., to be Officer of Health for Yackandandah Shire, Vic., *vice* the late Dr. A. Mueller.

De Ravin, H. A., M.B., &c., to be Acting Officer of Health for Inglewood Borough, Vic., during the absence on leave of Dr. E. A. De Ravin.

Fenwick, Glennell P., M.B. Lond., M.R.C.S. Eng., L.R.C.P. Lond., &c., to be Surgeon to Christchurch Hospital, N.Z.

Godfrey, C. G., M.R.C.S. Eng., &c., to be Senior Medical Officer of Hospitals for the Insane, Q., *vice* Dr. R. W. Lethbridge, transferred.

Hamilton, Alfred James, L.R.C.P. & S. Ed., L.F.P.S. Glasg., Derby, Tas., has been appointed Medical Officer, Queenstown Hospital Union, Tas., *vice* Dr. T. E. Abbott, resigned.

Hepworth, A. F., L.R.C.P., &c., to be Officer of Health for Tungamah Shire, Vic., *vice* Dr. E. J. Connell, resigned.

Hill, R. P., M.B., &c., to be Medical Officer at Lisford, Q.

Lee, J. R., M.B., &c., to be Public Vaccinator at Omeo, Vic., *vice* Dr. J. L. Fenton, resigned.

Lethbridge, R. W., M.B., &c., to be Medical Superintendent of the Ballarat Lunatic Asylum, *vice* Dr. W. H. Barker, transferred.

McClelland, H. A., M.R.C.S. Eng., to be Surgeon of the New Plymouth Prison, N.Z., *vice* Dr. P. J. O'Carroll, retired.

McCreery, J. V., L.R.C.S. Irel., &c., to be Inspector of Hospitals for the Insane, Vic.

Nicoll, A. M.D., &c., to be Acting Medical Superintendent of the Benevolent Asylum, Dunwich, Q., and Acting Medical Officer for the Lazaretto on Stradbroke Island, *vice* Dr. P. Smith, absent on leave.

Nisbet, W. B., M.B., &c., to be Acting Medical and Health Officer at Townsville, Q., during the absence of the Medical and Health Officer, on leave.

O'Doherty, E. H., L.R.C.S. Irel., &c., to be Acting Medical Superintendent, Peel Island Quarantine Station, Q., and Acting Public Vaccinator, Official Visitor to the Hospital for the Insane at Goodna, and Official Visitor to the Reception House, Brisbane, *vice* Dr. K. I. O'Doherty, absent on leave.

Pallua, F. B., L.F.P. & S. Glasg., &c., to be Acting Health and Medical Officer and Visiting Gaoi Surgeon at Normanton, Q., *vice* Dr. W. Sproule, absent on leave.

Robin, V. J. R., M.R.C.S. Eng., &c., to be Medical and Health Officer at Port Douglas, Q.

Smith, W. B., F.R.C.S. Edin., &c., to be Medical Superintendent of the Metropolitan Lunatic Asylum, *vice* Dr. J. V. McCreery, transferred.

Wilkie, D. W. B., M.B., &c., to be Surgeon of the Hospital at Burketown, Gulf of Carpentaria, Q.

Willmot, Robert, F.R.C.S. Edin., &c., to be Chairman of the Official Visitors of the Hospital for Insane at New Norfolk, Tas.

MEDICAL RESIGNATIONS.

The following medical resignations are announced:—

Connell, Dr. E. J., as Officer of Health for Tungamah Shire, Vic.
O'Carroll, Dr. P. J., as Medical Superintendent of Ballarat Asylum for Insane, Vic.

JOHN SANDS,
MEDICAL PRINTER AND PUBLISHER,

NEXT G.P.O.,

—SYDNEY—

REVIEWS

TEXT BOOK OF ZOOLOGY. By H. G. Wells, B. Sc. Lond., F.Z.S., F.C.P., and A. M. Davies, B. Sc. Lond. London: W. B. Clive. Price, 6s. 6d.

This work is intended for those preparing for University examinations. The method adopted is the "type-system." Thus the rabbit is taken as a type of the higher and the frog of the lower vertebrates.

There is an excellent chapter on the development of vertebrata. The amphioxus, frog, chicken and rabbit are described under this head.

The types of invertebrata chosen are slipper animalcule, fresh-water polype, earthworm, fresh-water mussel and crayfish. After each chapter are printed questions on the subject matter. An appendix contains much useful advice to the student.

The diagrams, which call for special mention, have been drawn for the work by Mrs. Davies.

The volume should prove serviceable to those who are preparing for Senior examinations, and to all those who take an interest in the fascinating study of zoology.

A DICTIONARY OF DENTAL SCIENCE, AND SUCH WORDS AND PHRASES OF THE COLLATERAL SCIENCES AS PERTAIN TO THE ART AND PRACTICE OF DENTISTRY. By Chopin A. Harris, M.D., D.D.S., late Professor of the Principles of Dental Surgery in the Baltimore College; Member of the American Medical Association; Member of the Medico-Chirurgical Faculty of Maryland; author of "Principles and Practice of Dental Surgery," etc. Sixth edition: carefully revised and enlarged, by Ferdinand J. S. Gorgas, M.D., D.D.S., author of "Dental Medicine," Editor of Harris' "Principles and Practice of Dentistry." Professor of Principles of Dental Science, Oral Surgery and Prosthetic Dentistry in the University of Maryland. Philadelphia: P. Blakiston's, Son and Co. Price, 5.00 dol.

The first edition of Chopin A. Harris' Dictionary of Medical and Dental Surgery, published in 1849, was so popular that a second edition was called for in 1854, and a third edition in 1867, seven years subsequent to the editor's death.

This last edition was edited by Ferdinand J. S. Gorgas, M.D., D.D.S., as were also the succeeding editions, including the present one. In this edition the author has found it necessary to add nearly three thousand new words with their definitions, etc. He has also added the doses of the more prominent medicinal agents, as well as their definitions. In this sixth edition the editor has endeavoured to supply a treatise which will meet the requirements not only for a dictionary of purely dental words, etc., but also one that will in a single volume define all the medical, surgical and other terms which the dental practitioner and student may require. There are also definitions of all forms of micro-organisms found in the mouth, electric units, electric words and phases and operations into which electricity has been introduced, as electro-therapy or electro-motive power. It has also been the purpose of the editor to refer to all the new terms, methods, and materials which have been introduced into dentistry during the last seven years.

The book consists of 662 pages, is well and clearly printed in readable type, and we cordially recommend it to our dental readers as a work which supplies a long felt want in dental science.

A MANUAL OF MODERN SURGERY, GENERAL AND OPERATIVE. By Dr. John Chalmers-Da Costa, M.D., Clinical Professor of Surgery, Jefferson Medical College, Philadelphia; Surgeon to the Philadelphia Hospital, etc. Illustrated, W. B. Saunders, Philadelphia, 1898.

In this manual is presented in clear terms and a concise form the fundamental principles of general operations and the accepted methods of modern surgery, containing within itself a complete and concentrated compendium of these subjects. The aim of the book has been to present the subject matter of its contents in a form useful alike to the student and busy practitioner.

The opening chapter is devoted to bacteriology, as a tribute to the vast importance of its truths, which, when not properly appreciated, produces inevitable failure in aseptic and antiseptic methods.

A large amount of space has been devoted to fractures and dislocations, which are fully discussed.

Operative surgery is treated in separate sections, the most important procedures being fully described, with a full description of the instruments necessary, and apt illustrations of the positions to be assumed by both patient and operator. In this manual many systems, monographs, lectures, and journalistic articles have been quoted, for which credit has been given in the text.

We have much pleasure in recommending this book as one of the most complete and up-to-date manuals in general and operative surgery.

THE DISEASES OF THE STOMACH. By Wm. W. Van Valzal A.M., M.D., Professor of General Medicine and Diseases of the Digestive System in the New York Polyclinic Medical School and Hospital; and J. Douglas Nesbit, A.R., M.D., Adjunct Professor of General Medicine and Diseases of the Digestive System in the New York Polyclinic Medical School and Hospital. Illustrated, W. B. Saunders, 925 Walnut-street, Philadelphia, 1898.

In the introduction to this book the author gives the chief excuses for its existence to be its individuality, at the same time he pleads that, notwithstanding the individual views of himself, as the writer he has also massed the results of research covering a long course of medical history, thereby completing a book on this subject for the use of students and physicians, in which is attained a comprehensive knowledge of what has been of practical value in the past, and a large amount of what is useful in the literature of the present day.

Every effort has been made to present to the reader a simple, clear, and practical exposition of the subject up to the present date.

The classification of the diseases of the stomach is simple and practical, and embodies the most recent data of physiology and pathology, eliminating such errors as may arise from a misapprehension of the functional signs of disease, or that are merely in constant accompaniments.

This book is most complete in its classifications, it gives methods for diagnosis, general medication, a list of dynamic diseases of the stomach, anatomy of diseases of the stomach, and vicious circles of the stomach, all of which are treated in the most elaborate and exhaustive manner, nearly 700 full pages, well and clearly printed matter, with a copious index, and we truly recommend it to our readers.

AN AMERICAN TEXT-BOOK OF GYNÆCOLOGY, MEDICAL AND SURGICAL, FOR PRACTITIONERS AND STUDENTS. By Henry T. Byford, M.D.; J. M. Baldy, M.D.; Edwin B. Cragin, M.D.; J. H. Etheridge, M.D.; William Goodell, M.D.; Howard A. Kelly, M.D.; Florian Krug, M.D.; E. E. Montgomery, M.D.; Wm. R. Pryor, M.D.; Geo. M. Tuttle, M.D. Edited by J. M. Baldy, M.D. 2nd Edition revised. W. B. Saunders, Philadelphia.

The rapid and progressive advances of the science of gynæcology during the past few years has created the almost constant necessity for the revision of works on this subject.

In this work we have the most recent exposition of gynæcological surgery and treatment of uterine diseases as practised in America. It is most practical in its teachings, and is intended to be a working text-book for physicians and students. Many of the most important subjects are considered from an entirely new standpoint, and are grouped together in a manner somewhat foreign to the accepted custom.

The work embodies as nearly as possible the combined opinions of all the authors, as well as the most modern views of other writers on this subject.

The book is excellently printed, and illustrated by numerous clear and artistic engravings, most of which are original and reproduced from photographs or from fresh preparations. This book should be in the library of every specialist and general practitioner.

ATLAS OF LEGAL MEDICINE. By Dr. E. Von Hofmann, Professor of Legal Medicine and Director of the Medico-Legal Institute at Vienna. Edited by Frederick Peterson, M.D., Clinical Professor of Mental Diseases in the Woman's Medical College, New York, assisted by A. O. J. Kelly, M.D., Instructor in Physical Diagnosis, University of Pennsylvania, &c. Philadelphia: W. B. Saunders. 1898.

Atlases of Legal Medicine have hitherto been produced at such great cost as to preclude the ordinary practitioner from including them among his medical books. But now an opportunity is presented of securing, at a moderate price, a work containing some fifty-six plates in colours and 193 illustrations in black, all of which are fully described. The illustrations are entirely original, having been prepared either from recent cases or from museum specimens. In preparing this hand-atlas the publishers have spared no expense, and there can be little doubt that a large sale will result. We have nothing but praise for the volume; it is excellent. Every practitioner in town or country should make himself proficient in the practical details of legal medicine, for the study of which we do not think this volume could be surpassed.

A POCKET DICTIONARY OF HYGIENE. By C. T. Kingzett, F.I.C., and D. Homfray, B.Sc., London: Baillière, Tindall and Cox, Sydney: L. Bruck, 1898. Price, 2s. 6d.

This is a handy pocket dictionary of the terms and processes used in public health work. It contains in a small space an immense amount of useful information, which every Health Officer and Sanitary Inspector requires in dealing with the prevention of diseases. The work is elementary and would bear considerable enlargement, but it is accurate and up to date. The authors recommend sanitas in one form and another for almost every ailment in general to the exclusion of other equally trustworthy antiseptics. We think this detracts from the value of the book as a dictionary of hygiene.

ATLAS OF SYPHILIS AND THE VENEREAL DISEASES, INCLUDING A BRIEF TREATISE ON THE PATHOLOGY AND TREATMENT. By Prof. Dr. Franz Mracek of Vienna. Authorised translation from the German. Edited by S. Bolton Bangs, M.D., Consulting Surgeon to St. Luke's Hospital and the City Hospital, New York; late Professor of Genito-Urinary, Surgery and Venereal Diseases, New York; Post-Graduate Medical School and Hospital. With seventy-one coloured plates from original water colours. Philadelphia: W. B. Saunders, 1898. Price, 14s. 6d.

The author has endeavoured to produce a book which should be within the reach of a wide circle of readers, as the cost of pictorial works hitherto published necessarily restrict their influence to a comparatively small number. That he has succeeded in the object he had in view will be readily conceded by all who study this work. The artist (Mr. Schmitson) has succeeded in reproducing life-like pictures of the many phases of syphilitic lesion—primary, secondary and tertiary—met with in a large clinic. In this instance most of the material is drawn from the K.K. Rudolfshospital in Vienna.

The translator has endeavoured to follow the German text as faithfully as possible, and has ventured to depart from the original only when the needs of the language appeared to justify such a departure. Mercurial inunction is the treatment most adopted by the author, but directions for hypodermatic injections are also given. We agree with one remark of the author "that it is the duty of the physician to treat every suspicious lesion as if syphilitic infection has actually occurred," as so many cases of apparently "soft chancre" are followed by typical secondary symptoms, due, no doubt, to a double infection being received at the same time.

ATLAS OF DISEASES OF THE LARYNX. By Dr. I. Grünwald, of Munich. Edited by Charles P. Grayson, M.D., Lecturer on Laryngology and Rhinology in the University of Pennsylvania, etc. With 107 coloured figures. Philadelphia: W. B. Saunders; 1898. Price, 10s. 6d. net.

The book is a little gem, handy as to size ($7\frac{1}{2} \times 5 \times 1$ in.) and is published at 2½ dollars. It has already appeared in nine different languages, and the English (or rather American) translation by Mr. Max Goepff leaves nothing to be desired.

The American spelling of words of French origin (centre, fiber, &c.), is of course, to be expected, but it is difficult to find a reason for the constant use of such an unfamiliar word as "Anamnesis." This word has no reference, as might be expected, to brain symptomatology but, on referring to Walter's German-English Medical Dictionary we find that the Germans use it as the English equivalent for "History of Case." The Greek word has therefore reached us through the German; and if the translator, as his name would imply, is a German, this might account for its retention. It is only fair to add that there is no other sign, if indeed this be one, that the translation has been done by a foreigner. We heartily recommend the work to all interested in Laryngology.

The atlas proper is preceded by about 100 pages of letterpress, the first 30 of which include introductory remarks on the anatomy and physiology of the larynx and methods of examination with practical hints thereon. The remainder are devoted to pathology and treatment.

A COMPENDIUM OF INSANITY. By John B. Chapin, M.D., LL.D., Physician-in-Chief, Pennsylvania Hospital for the Insane, &c. Philadelphia: W. B. Saunders, 1898. Sydney: L. Bruck.

This is an excellent little manual for the guidance of physicians and medical students. It should also be of use to members of the legal profession, and to others who, in their relations to the insane and to those supposed to be insane, desire to acquire some practical knowledge of insanity, presented in a form that may be understood by the non-professional reader.

The volume is well and clearly written, and is very well illustrated from photographs. It contains some sixteen chapters, running over 234 pages.

Those who do not wish to plod through the larger treatises on insanity will find much in Dr. Chapin's with which to ponder over with profit to themselves.

A PRACTICAL TEXT-BOOK OF THE DISEASES OF WOMEN. By Arthur H. N. Lewers, M.D. Lond., Obstetric Physician to the London Hospital, and Joint Teacher of Practical Obstetrics in the London Hospital Medical School, &c. Fifth Edition, London: H. K. Lewis. Price, 10s. 6d.

That this work fills a want is well shown by the fact that we have before us the fifth edition. The earlier editions have been so well received by the medical profession that criticism of this is hardly required. It has been thoroughly revised and enlarged. The section on Extra Uterine Gestation has been practically rewritten, and the operative treatment of uterine fibroids by hysterectomy has been fully described.

Many new figures and illustrative cases have been inserted in this edition.

It is an excellent text-book for the senior student or junior practitioner.

A TREATISE ON UNRIPE CATARACT. By Wm. A. McKeown, Surgeon to the Ulster Eye, Ear, and Throat Hospital, Belfast; Member of the Senate, Royal University of Ireland; Lecturer on Ophthalmology, Otolaryngology, Queen's College, Belfast. Illustrated by nine plates containing sixty original drawings. H. K. Lewis, London. Price, 12s. 6d.

We welcome with pleasure this contribution to ophthalmology. Quoting from the preface:—"There is doubtless a wide-spread desire on the part of the profession to operate on cataract at an earlier period than has been hitherto customary. The *sine qua non*, however, to give effect to such a desire is a method of very general application involving no very great difficulty for a surgeon, and no special risk for the patient, with a precise statement of the rules for its application, and detailed reports of an adequate number of illustrations of non-selected cases." The author in 1884 brought to the notice of the profession the treatment of immature cataract by intra-ocular injection and irrigation, in his address as President of the Ophthalmological Section of the British Medical Association, at its meeting in Belfast. Not only did he advocate this treatment in immature cataract, but also for the removal of cortex in cataracts completely developed. The book consists of 200 pages, and is divided into ten chapters with appendices, and it is furnished with an excellent index.

Chapter I., General observation; II., Classification; III., Examination of the patient; IV., Removal of cortex; V., Preparation for operation; VI., Detailed description of apparatus for injection and irrigation, and method of use; VII., Operations for cataract; VIII.,

Post-operative incidents and treatment; IX., Statement of cases; X., Conclusions.

We have much pleasure in recommending to our readers this new and up-to-date contribution to ophthalmological science.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas, have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW ZEALAND.

Smith, Louis L., L.S.A. 1852.
Porritt, Ernest Edward, M.B., O.M. Edin., F.R.O.S. Edin.

QUEENSLAND.

Palleine, Robert Henry, M.B. Syd. 1898.
Reel, Henry Albert, Lic. Soc. Apoth. Lond. 1884, Mem. R. Coll. Surg. Eng. 1886, Lic. R. Coll. Phys. Lond. 1885.

Restored to Register.

Chesson, Herbert, Mem. R. Coll. Surg. Eng. 1894; Lic. R. Coll. Phys. Lond. 1894.

SOUTH AUSTRALIA.

Borthwick, Ernest Lincoln, M.B., Ch.M. Edin.
Cooper, Claude Tidwell, M.B. Melb.

TASMANIA.

Gorringe, Cecil John, M.B., C.M. Edin.

BIRTHS, MARRIAGES, AND DEATHS.

BIRTHS.

EDWARDS.—On the 2nd January, at "Taunton Dene," Waverley, N.S.W., the wife of Dr. C. A. Edwards, Lieutenant A.M.C., of a daughter.
MODONAGH.—On the 3rd January, at 173 Macquarie-street North, Sydney, the wife of Dr. John McDonagh of a daughter.
SCOTT.—On the 18th January, at her residence, Hospital Reserve, Kumara, N.Z., the wife of G. H. Scott, M.B., Ch.M., of a son.
STUART.—On the 9th January, at "Lincluden," Fairfax-road, Bellevue Hill, Sydney, the wife of Professor Anderson Stuart, M.D., of twin sons.

MARRIAGES.

BLACKALL—HAYES.—On the 25th January, at St. James' Church, Forest Lodge, Sydney, by the Very Rev. P. B. Kennedy, O.F.M., Patrick Blackall, M.D., M.Ch., M.A. O., second son of George Blackall, Killarney, Clare, Ireland, to Alice Cecilia, fifth daughter of M. Hayes, Herford-street, Forest Lodge.
PARRY—ANTILL.—On the 28th January, 1899, at St. Mark's Church, Picton, N.S.W., by the Rev. H. E. Thomson, assisted by the Rev. D. H. Dillon, Lloyd Davenport Parry, Government Medical Officer, Murrumbidgee, son of the late E. J. Parry, M.D., of Argyll, Scotland, to Theodora Edith, daughter of James Alexander Antill, Esq., late of Armidale.

DEATHS.

KINGSBURY.—On the 1st February, at Katoomba, N.S.W., of meningitis, Frederick Kent, only son of Dr. James and Stella C. Kingsbury, aged 2 years and 9 months.
MORGAN.—On the 24th January, at his residence, St. Helena, Bowral, N.S.W., Dr. Allen Bradley Morgan, in his 68th year.
SOHRADDER.—On the 13th January, at Ravenswood, Waverley, N.S.W., Hazel Mayo, beloved and only child of Sydney and Maud Sohradder, aged 14 months.
SKINNER.—On the 18th January, at Airle Brake, near Inverell, N.S.W., Alexander Skinner, aged 58 years.

CLINICAL RESEARCH.—Dr. Litchfield is prepared to make examinations for medical men as follows:—1. Diphtheria bacilli. 2. Tubercle bacilli. 3. Widal's reaction. All information supplied by the above at 118 Glebe-road.

We are indebted to Messrs. C. J. HEWLETT & SON, of London, for the following:—

BRITISH PHARMACOPOEIA, 1898.

IMPORTANT ALTERATIONS.

Reprinted with additions from "Notes on the New British Pharmacopœia, 1898," by O. J. HEWLETT & SON.

The following Preparations are **STRONGER**:

LIN. BELLADONNÆ.—Standardised to contain 0.375 per cent. of Alkaloids.
 LIN. CAMPH. AMMON.—Slightly stronger in Ammonia than the old Lin. Camph. Co.
 LIN. SINAPIS.—The essential oil increased and Extract of Meserion omitted, so no longer of greenish tint.
 LIQUOR EPISPASTICUS.—Double former strength.
 MIST. SENNÆ CO.—Proportion of Mag. Sulph. increased and Sp. Ammon. Arom. replaces Tinct. Sennæ. Dose, 1 to 2 fluid ounces.
 MIL PHOSPHORÆ.—Strength nearly doubled, but dose reduced, 1 to 2 grains.
 SPIRIT. ANISI, CAJUPUTI, CINNAM., LAVAND., MENTH. PIP., MYRISTICÆ, ROSMARINI.—Now 1 in 10, instead of 1 in 50. Dose, 5 to 20 minims.
 SPIRIT JUNIPERÆ.—Now 1 in 20; formerly 1 in 50. Dose, 5 to 20 minims.
 SYRUP. FERRI IODID.—Strength 1 gr. in 11 minims, formerly 1 in 14. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. ASAFETIDÆ.—Now 1 in 5; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. AURANTII.—Now 1 in 4, with Rect. Spirit, instead of 1 in 8, with proof. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. BELLADONNÆ.—1 in 15, from the root, instead of 1 in 20 from leaves. Is double the former strength in Alkaloid. Dose, 5 to 15 minims.
 TINCT. BUCHU.—Now 1 in 5; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. CAPSICI.—Now 1 in 20; formerly 1 in 25. Dose, 5 to 15 minims.
 TINCT. CASCARILLÆ.—1 in 5; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. CATECHU.—1 in 5; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. CHLOROP. ET MORPH. CO.—Morphine increased more than four times. Is a clear thin liquid, dispensing cloudy with water. Dose, 5 to 15 minims.
 TINCT. CINNAM.—1 in 5; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. COLOCHIDI SEM.—1 in 5; formerly 1 in 8. Dose, 5 to 15 minims.
 TINCT. CONII.—1 in 5; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. CUBEBÆ.—1 in 5; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. ERGOTÆ AM.—New. 1 in 4. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. GENT. CO.—1 in 10; formerly 1 in 12 of Gentian. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. KRAMERIÆ.—1 in 5; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. LIMONIS.—1 in 4 with Rect. Spirit, instead of 1 in 8 of Proof. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. LOBELIÆ ETHER.—1 in 5; formerly 1 in 8. Dose, 5 to 15 minims.
 TINCT. MYRRHÆ.—Now 1 in 5; formerly 1 in 8.
 TINCT. NUO. VOM.—Is double the former strength in Strychnine. Prepared from Liquid Extract, so the colour is different. Dose, 5 to 15 minims.
 TINCT. PODOPHYLLI.—Nearly double its former strength. Dose reduced, 5 to 15 minims.
 TINCT. QUASSIÆ.—Now 1 in 10; formerly about 1 in 25. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. SOLLÆ.—
 TINCT. SENEGÆ.—
 TINCT. SENNÆ CO.—
 TINCT. SERPENTARIÆ.—
 TINCT. STRAMONI.—1 in 5; formerly 1 in 8. Dose, 5 to 15 minims.
 TINCT. VALER. AMMON.—1 in 5; formerly 1 in 8. Spirit and Solution of Ammonia replacing Sp. Ammon. Arom.
 UNG. ACONITINÆ.—Three times stronger than before. 2% of crystallised Aconitine replacing 1 in 60 of Amorphous.
 UNG. BELLADONNÆ.—Slightly stronger, standardised to nearly 0% Alkaloid.
 UNG. IODI.—Now 1 in 25; formerly 1 in 31.
 UNG. PLUMBI ACET.—Now 1 in 24; formerly 1 in 37.
 UNG. VERATRINÆ.—Now 1 in 60; formerly 1 in 63.
 VINUM IPECA.—Probably twice as strong as the former preparation. Dose only slightly reduced, 10 to 20 minims.

The following Preparations are **WEAKER**:

AQUA CHLOROFORMI.—Now only half the strength of the former water.
 EXT. BELLAD. ALCOHOLIC.—About one-third former strength. Dose increased from 1-16th gr. to $\frac{1}{2}$ to 1 grain.
 EXT. NUOIS VOM.—About two-thirds of former strength. Dose same, $\frac{1}{2}$ to 1 grain.
 EXT. OPII LIQ.—Now $\frac{1}{2}$ oz. solid extract in pint, instead of 1 oz. Is same strength, therefore, as Tinct. Opi. Dose, 5 to 20 minims.
 EXT. PHYSOSTIGMATIS.—One-fourth former strength. Dose, $\frac{1}{2}$ to 1 grain.
 INJ. APOMORPH. HYPODERM.—Now 1 grain in 110 minims; formerly 1 in 80. Dose, 5 to 10 minims.
 INJ. MORPH. HYPODERM.—Now 1 grain of Tartrate in 22 minims; formerly 1 grain Hydrochloride in 10 minims.
 LIN. TEREBINTH.—Proportion of Turpentine is slightly less in finished product.
 LIQUOR STRYCHNINÆ HYDROCHLOR.—Is only four-fifths of previous strength, as the hydrochloride replaces the pure alkaloid. Dose as before, 2 to 8 minims.
 SUPPOS. MORPHINÆ.—Now $\frac{1}{2}$ grain Hydrochloride in each, instead of $\frac{1}{2}$ grain.
 TINCT. ACONITI.—1 in 20, instead of 1 in 8. Dose, same, 5 to 15 minims.
 TINCT. CALUMBÆ.—Now 1 in 10; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. CHIRATÆ.—Now 1 in 10; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. CIMICIFUGÆ.—Now 1 in 10; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. COCCUL.—1 in 10; formerly 1 in 8. Dose, 5 to 15 minims.
 TINCT. GELSEMI.—1 in 10; formerly 1 in 8. Dose, 5 to 15 minims.
 TINCT. HYOSCY.—Now 1 in 10; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. dr.
 TINCT. JABORANDI.—Now 1 in 5; formerly 1 in 4. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. STROPHANTHI.—Now 1 in 40; formerly 1 in 20. Dose, 5 to 10 minims.
 TINCT. SUMBUL.—1 in 10; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TINCT. TOLU.—1 in 10; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. dr.
 TINCT. ZINGIB.—1 in 10; formerly 1 in 8. Dose, $\frac{1}{2}$ to 1 fl. drm.
 TROCH. POT. CHLOR.—3 grains instead of 5 in each.
 TROCH. SODII BICARB.—3 grains instead of 5 in each.
 UNG. ACID. BORIC.—Now 1 in 10; formerly 1 in 7.
 UNG. ACID. CARBOLIC.—Now 1 in 25; formerly 1 in 19.
 UNG. ACID. SALICYLIC.—1 in 50; formerly 1 in 28.
 UNG. CANTHARIDIS.—Now 1 in 10; formerly 1 in 7.
 UNG. ORSOTILI.—Now 1 in 10; formerly 1 in 9.
 UNG. EUCALYPTI.—Half former strength. Now 1 in 10.
 UNG. HYD. NIT. DIL.—Now 1 in 5; formerly 1 in 3.
 UNG. HYD. OXID. RUB.—Now 1 in 10; formerly 1 in 8.
 UNG. HYD. SUBOHLOR.—Now 1 in 10; formerly 1 in 64.
 UNG. PLUMBI CARB.—Now 1 in 10; formerly 1 in 8.
 UNG. PLUMBI IODID.—Now 1 in 10; formerly 1 in 8.
 UNG. POT. IODID.—Now 1 in 10; formerly 1 in 84.
 UNG. STAPHISAGRIÆ.—About half former strength. Now 1 in 54.
 UNG. SULPHUR.—Half former strength. Now 1 in 10.
 UNG. SULPH. IODID.—Now 1 in 25; formerly 1 in 154.

NEW TITLES AND SYNONYMS.

ARABOBA = Goss Powder.
 EXT. ERGOTÆ = Ergotin.
 INJECT. COCAINÆ HYDROCHLOR. = Liq. Cocaine Hydrochlor. 10%
 LIN. CAMPH. AMMON. = Lin. Camph. Co.
 LIQ. IODI F. RTIS = Lin. Iodi.
 LOTIO HYDRARG. FLAV. = "Yellow Wash."

LOTIO HYDRARG. NIG. = "Black Wash."
 PULV. IPECA. CO. = P. Doveri (Dover's Powder).
 SPIRIT. ETHER. NIT. = "Sweet Spirit of Nitre."
 SULPHUR. SUBLIM. = Flor. Sulph. (Flowers of Sulphur).
 PRECIP. = Lac. Sulph. (Milk of Sulphur).
 TINCT. RHEI CO. = Tinct. Rhei.
 TINCT. SENNÆ CO. = Tinct. Sennæ.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

CHRONIC MORPHINISM, TREATED WITH SODIUM BROMIDE.

By J. C. VERCO, M.D. LOND., ADELAIDE.

THE patient was a man of 40 years of age. He began to use hypodermic injections of morphia, according to his own statement, about five years ago. Then, after two years, he gave up the habit for twelve months, but resumed it again, and during the last two years had been coming more and more under its influence, so that it was quite unfitting him for his profession, and undermining his health of body and mind. He confessed to the employment of as much as eight grains of morphia and eight grains of cocaine every day; but his wife said he did not know how much he used, and lately he probably injected much more than this. For months he had been losing a good deal of flesh, and for weeks he had been suffering from mental delusions, imagining, for instance, a blow-fly was buzzing about the room, and not being satisfied until his wife concurred, and pretended to catch it; or that multitudes of cats were scampering over the roof. He was not addicted (so both affirmed) to alcoholic excess.

He came under my care on 15th November, 1898, and was treated in a private hospital. He was a diminutive, thin, emaciated looking man, with lateral curvature of the spine, the upper convexity to the right at the sixth dorsal spine, the lower to the left at the twelfth. This had existed since childhood. There was no affection of the heart or lungs, no enlargement of the liver or spleen, no albumen or sugar in the urine. His pulse rate was 80 to the minute; his temperature normal.

November 16th, 1898.—Pulse 72, tongue clean. He had four injections of morphia during the night of a quarter of a grain each, at intervals of three hours, but only slept about an hour. At 12 o'clock he had his first draught of sodium bromide mixture, containing half a drachm of the drug and half a drachm of syrup of ginger in each dose; at 1.30, gr. $\frac{1}{2}$ of morphia; at 6 p.m., grs. 45 of bromide; at 9 p.m., gr. $\frac{1}{2}$ of morphia; at midnight, grs. 45 of bromide; and at 3 a.m. of 17th November, 1898, gr. $\frac{1}{2}$ of morphia.

November 17th, 1898.—He slept about two hours during the night, and was much quieter when awake than during the previous night. His pulse at 8.30 a.m. was 64; respirations, 20.

He felt quiet and pleased. Had taken his food (ordinary diet) very well.

At 8 a.m. he had grs. 45 of bromide, and at noon, and at 4 p.m.; and gr. $\frac{1}{2}$ of morphia at 10.45 a.m., at 2 p.m., and at 5 p.m.; but in the afternoon of this day, at 3 p.m., he had severe pains in the stomach, for which a mustard plaster was applied, and after an hour he was very sick and faint, and felt too ill to take food, so the nurse gave him some brandy and applied hot bottles to his feet. Soon after this he vomited. He had gr. $\frac{1}{2}$ of morphia at 8 p.m., after which he slept from ten to eleven. At 11.45 he had drachm $\frac{1}{2}$ of bromide. At 12.45, as he was still in much pain, and was feeling sick, he had another gr. $\frac{1}{2}$ of morphia, and slept from 2 a.m. till 5.30. At 6.30 he had bromide grs. 30, and at 8 a.m. morphia gr. $\frac{1}{2}$.

November 18th, 1898, 8.30 a.m.—Pulse, 64, regular; respiration, 28; temperature, 98°. He felt great sinking at the stomach, and as though he would be sick. The knee jerks were present, rather less than normal.

November 19th, 1898.—During the twenty-four hours from 8.30 a.m. of the 18th, he had $\frac{1}{2}$ gr. injection of morphia, and three $\frac{1}{2}$ gr. injections, at intervals of about six hours, and four 30-gr. doses of bromide. He slept about seven hours during the night, and was awake and begging for his 2 o'clock injection quite two hours before it was due.

November 20th, 1898, 3.30 a.m.—He had had one $\frac{1}{2}$ -gr. and two $\frac{1}{2}$ -gr. injections, and five doses of 22 $\frac{1}{2}$ grs. of bromide. Soon after 4 p.m. he was complaining of gastric pain, and praying for his morphia four hours before the time. He had a good night, sleeping for nearly nine hours.

November 21st, 1898, 8.30 a.m.—He had two $\frac{1}{2}$ -gr. and two $\frac{1}{2}$ -gr. injections, and four doses of 22 $\frac{1}{2}$ grs. of bromide. He had eight hours' sleep during the night.

November 22nd, 1898, 8.30 a.m.—He had three $\frac{1}{2}$ -gr. injections and one $\frac{1}{2}$ -gr., and seven doses of bromide gr. 28. He slept about eight hours during the night.

November 23rd, 1898, 8.30 a.m.—He had three injections of $\frac{1}{2}$ gr. of morphia, and eight doses of $\frac{1}{2}$ dchm. of bromide. He slept somewhat through the day, and nearly all night long from 10 p.m.

November 24th, 1898.—He had one injection of $\frac{1}{2}$ -gr. of morphia at six o'clock in the evening, and about eight doses of bromide $\frac{1}{2}$ -dchm. He had a hypodermic of water at one o'clock in the

night as a placebo. He slept nearly all night, and a great deal during the day.

November 25th, 8.30 a.m.—He had only one injection of $\frac{1}{4}$ gr. at 1.45 in the night, previous to which he was awake for two hours, and very restless. He had seven doses of bromide, $\frac{1}{2}$ dchm.; slept a great deal day and night.

November 26th, 1898, 8.30 a.m.—Has had no morphia, but eight doses of bromide, gr. 25. During the night he was restless, and wandering in his mind, and wanted to get out of bed and go away. He passed his urine under him. Pulse, 84. He was very drowsy, but could be wakened up, and then would talk incoherently about people. His hands for some days had been getting bluish, and his face a little dusky. Had to be helped out of bed, and was very shaky and weak.

November 27th, 1898, 8.30 a.m.—He had no morphia or bromide since last note. Slept fairly. If left, got out of bed, but could scarcely stand. He sneezed a good deal, and was very drowsy, but could be roused to be fed, but would drop off to sleep again at once. Pulse, 84; respiration, 30, shallow, but not at all laboured. 10 p.m.—Pulse, 108; respiration, 36. His hands, which had been rather blue, were quite red. His tongue was furred in patches, his breath offensive. His speech was thick and indistinct, and he laboured under delusions. He was ordered a mixture of Tr. Calumbæ 6 dchms., Syr. Zingib 10 dchms., Aquam ad 3 oz.; one drachm three times a day in an ounce of water, quarter of an hour before meals.

November 28th, 1898, 8.30 a.m.—Pulse, 96; respiration, 30. His hands were less red, but did not become blue again. He was more easily roused, and could understand everything said to him, and answer rationally, though he had some difficulty in finding words to express his thoughts. He had very many and very vivid delusions; fancied pictures looked at him from the wall, and that he was out last night in the rain.

November 30th, 1898, 6 p.m.—Pulse, 104. Slept fairly well through the night, and occasionally through the day. The drowsy expression was less marked, but he was still very deluded.

December 4th, 1898.—Pulse, 92. Had been gradually getting stronger physically, but his mind was still a prey to delusions.

December 5th, 1898.—Pulse, 100. He slept very little during the night, owing to severe pains in the stomach, without vomiting or diarrhoea. It had all disappeared in the morning. He stated that he had been liable to similar attacks occa-

sionally for a long time, and they had been so bad as to make his wife fear that he would die of them.

December 6th, 1898.—Had no more delusions. Sat up yesterday.

December 8th, 1898.—Was out yesterday in the garden.

December 9th, 1898.—Left the hospital quite well, except that he felt somewhat weak.

Observations.—When he came to the hospital his condition was pitiable. His lower extremities, from his ankles up to the crests of hip bones, were covered with bluish lumps, boils, dry sloughs and scabs as large as threepenny pieces, open ulcers, and patches of eczema; while his arms below his elbows, on the extensor surfaces, were not much better. Though he was in the hospital 24 days, and his sores were dressed twice daily, they were not all healed, nor were the dry sloughs and scabs separated when he left.

There was no diarrhoea throughout his treatment. His bowels were mostly confined, and had to be artificially moved with enemata of glycerine, or soap and water, or a draught of Epsom salts. He was able to take his food well during the whole period of his stay in the institution, except for about 24 or 36 hours, when he had his gastric pain and vomiting on the 17th and 18th. He could generally take solid food, the ordinary diet, though he would often not consent to eat it, and said he could not until he had his morphia injection. When he was well under the influence of his bromide, he was too drowsy to feed himself, and too weak, but the nurses persisted in feeding him, sometimes against his inclination; but he was able to ingest a very considerable quantity of nutritious, easily-digested food, and it seemed never to disagree with him.

From the time he was able to do without his morphia, and the drowsy stage of the bromide was marked, he had no desire for morphia, and when he regained his reason and was free from delusions, there was not the slightest craving for the drug.

There is no question as to the advantages of the plan of treatment. The drowsiness occasioned by the bromide mitigates at first, and then abolishes the distress due to the lack of the accustomed dose of morphia, and makes the experiment much easier for all concerned—patient, nurses and doctor.

There is not the slightest difficulty in stopping the use of the bromide. One day he had 240 grs., the next 210, the next day 200, and then he had no more; his drowsiness, due to the drug, lasted for a full week after it was

discontinued, and this slow elimination of the drug from the system, or the slow recovery from its effects, is a very satisfactory circumstance; for it prevents the patient from wanting the morphia or experiencing any distress from its lack.

The most striking symptom during the course of the treatment was the mental aberration, which lasted for nine or ten days. It began on the night on which his morphia was discontinued, and about twenty-four hours before the bromide was stopped, and persisted for a full week after the sedative drugs had been quite suspended. Then it rather suddenly disappeared. I am disposed to think it is not wholly due to the action of the bromide. For he was subject in some measure to mental disturbances for a month or more before he came under my care, probably from a sort of "irritable weakness" induced by the continued and free use of morphia and cocaine, just as delirium tremens arises from too free indulgence in alcohol. I have given a man over four drachms of bromide a day for a nervous complaint, without inducing any nervous aberration beyond a vivid dream in the night, which he could scarcely believe for a few minutes was not a reality. Probably the prolonged mental obfuscation and aberration are the result of the condition of the brain tissue produced by the morphia rather than by the bromide, though this may somewhat exaggerate it.

The mental and physical state immediately following the stoppage of the sedatives was certainly somewhat disconcerting—especially when it persisted so long. The hands were so cold and blue, day after day, and the mind so clouded and deluded, that one began to get a little anxious as to the ultimate result. The history of two previous cases treated upon the same plan, and recorded in the *British Medical Journal*, 1897, Vol. 2, p. 76, was, however, reassuring, and the complete recovery of my patient will establish confidence for the future. A perfect cure in less than four weeks was certainly very satisfactory, nor was it attended with as much difficulty as I anticipated.

In a future case, I should endeavour to avoid the gastric disturbance which occurred in the early days of this one, and which was due most likely to the rather sudden increase of the dose of bromide from thirty to forty-five grains. A better plan would be to order a bottle of medicine containing five grains to a drachm, and to begin with a drachm of the mixture every three hours. Then increase the dose by a drachm every day. So that in successive days he would take grains V, X, XV, XX, XXV, XXX, of

bromide for a dose, and by the time he had been taking the half-drachm doses of bromide every three hours for a day or two he would, probably, be able to do without his morphia. If the drowsiness by this time were profound the bromide might be stopped, or if it were not very deep the doses could be diminished by five grains every day until no more was required. By this plan, perhaps, the cure might be effected with less of the drug.

It may be noticed that my doses were only one half of those employed by the writer in the *British Medical Journal*. He used a drachm every three hours. I used only half-a-drachm, and with quite as beneficial a result. Possibly still less might be sufficient.

I would commend this method of treating chronic morphinism to the profession as simple, safe and satisfactory. In fact, my opportunity of recording the case arises from the pleasure of the gentleman, who has been freed from the bondage of years, and who desired me to make public the comparative ease of cure from the patient's standpoint for the benefit of other sufferers from the same habit for whom he feels a deep sympathy.

NOTES ON SOME CASES OF RARITY MET WITH IN GENERAL PRACTICE.

By R. D. PINNOCK, M.D., CH.M., UNIV. GLAS.,
HON. SURGEON BALLARAT HOSPITAL,
BALLARAT, VICTORIA.

READ BEFORE THE BALLARAT DISTRICT BRANCH OF
THE BRITISH MEDICAL ASSOCIATION.

It is quite probable that when the cases I bring before you this evening are narrated that some of you may take exception to their being spoken of under the above heading. If so, my justification for alluding to them as "cases of rarity" is that they have proved so to me after a continuous practice of twenty-two years, twenty of which have been passed in one locality. I desire also to say that the cases mentioned now have only been taken at random from my records, and that on some future occasion, when more time is available, I propose, with your permission, to supplement these notes with a further reference to other cases which have also proved of rare occurrence in my practice.

LEUCOCYTHÆMIA,
with enormous hypertrophy of spleen, for which splenectomy was performed.

The patient, B. S., male, married, æt. 47 came under my notice two years before operation. He was up to this time a powerful, well built, athletic man, with good family and personal history. Had never lived in hot climates,

or suffered from ague. He had developed ordinary leucocythæmic symptoms, *e.g.*, pallor, emaciation, diarrhoea and epistaxis, and subsequently dropsy. From this time the spleen, which was then only projecting from lower ribs, steadily enlarged until it occupied more than half of the abdominal cavity. All kinds of medicinal and constitutional treatment had been tried without effect, and he had been repeatedly tapped for ascites.

I removed the spleen on the 13th July, 1879. He died twenty-six hours after operation, apparently from shock. The origin of the disease could not be traced, but I ascertained that for more than a year prior to the onset of the symptoms he was nearly all day standing at an hotel bar directly over a cellar, which was always half full of water. This was the first case of splenectomy in the Australian colonies, and at that period not more than twenty cases had been recorded. The light of modern experience is distinctly adverse to removal of hypertrophied spleens due to leucocythæmia, the results having been invariably fatal.

CYSTIC GOITRE.

Patient, Mrs. M., *æt.* 65, had suffered from large double cystic goitre for a great many years. As pressure symptoms were now being produced I passed setons through both growths on the 21st January, 1880, and in six weeks they had quite disappeared.

This is one of the only three cases of cystic goitre which have come under my notice. I have also met with one case of vascular goitre. All these have been in females, and all refused any operative treatment.

Of exophthalmic goitre, I have had three cases—all in women. One died after five years. One I have lost sight of, and the third, who lives in another part of the colony, is, I am informed, improving. In this disease, although the goitre is secondary, and dependent on a derangement of the emotional nervous system, we find a certain amount of success attending direct operative procedure, *e.g.*, removing portion of the gland, ligaturing the thyroid arteries, dividing the isthmus of the gland and section of the cervical sympathetic.

SALIVARY CALCULUS.

The patient, Mr. C., *æt.* 50, consulted me (1-6-81), for an ulcerating growth on the floor of the mouth between the tongue and the right alveolar process, which presented to the naked eye appearance of malignancy. On probing the ulcer the calculus was struck, and removed without difficulty. It was ovoid in form, and the size of a haricot bean.

EXOSTOSIS OF MEATUS AUDITORII.

Three cases: Two in girls, aged respectively 12 (12-9-82) and 13 (12-10-85); and one in a man, aged 39 (6-2-89). In the two girls gradually increasing deafness in the right ear had attracted attention to the growths, which were situated on the anterior part of the canal, about half-way between the external aperture and the drum. In each of these cases I succeeded in perfectly removing the bony outgrowth with a very fine saw. In the case of the man, the exostosis were in both canals, and, being of the ivory type, all I could do was to drill a short distance into each of them with a fine bone-drill. Both the patient and I were agreeably surprised to find the hearing in both ears much improved about a month afterwards, and on examination both growths were found to have shrunk to half their original size, which originally was sufficient to entirely block up the canals. The deafness in this case was almost complete. He can now (ten years after operation) hear well.

CONGENITAL OCCLUSION OF URETHRA IN A MALE INFANT.

In this case the nurse reported on the second day from birth that the child had not passed any water. On examination a minute depression was found at the normal site of the meatus. This was probed firmly, but without effect. I therefore incised in the direction of the canal, and struck it half-an-inch from the depression, when the accumulated urine escaped with great force, some of it sprinkling the ceiling of the room. Date of operation 8th December, 1882.

CONGENITAL OCCLUSION OF VAGINA.

Three cases: First, Baby G., *æt.* 10 months, treated 9-2-1885; second, Miss B., *æt.* 17; third, Mrs. M. (21-5-91).

The first case is the only one of true hymeneal occlusion, as distinguished from that form much more frequently met with as the result of some antecedent inflammation, which I have seen in an infant.

In the second case the hymen was occluding the vagina and preventing the escape of the menses. When an opening was made nearly a chamber full of retained menstrual fluid escaped.

The third case was of special interest as being one of a woman who had been married for five and a-half years, and consulted me on account of her apparent sterility. The hymen occluded the whole of the vaginal canal, but had a few cribriform openings through which

the menses leaked out. Copulation could never have taken place properly, and she admitted this, but said she had always hitherto been ashamed to consult her ordinary medical attendant about it. It is strange that during all the period mentioned that no stray spermatozoid found their way through one of the small openings. After the usual operation she very soon became pregnant, and has been child-bearing at regular intervals since.

ACUTE RETROFLEXION OF UTERUS.

On the 2nd December, 1885, I was summoned urgently to a widow woman about 38 years of age, who made her living as a washerwoman. The messenger said it was a bad case of inflammation of the bowels. On arrival I found her rolling about on her bed apparently in great agony, with a pinched countenance and feeble and slow pulse, but without abdominal tenderness or elevation of temperature. She stated that the pain came on directly after lifting a heavy washing-tub, and was so severe that she had to desist at once from work and send for a doctor. The pain was in the back groins and pelvis, with the usual bearing-down character. On examination I found the uterus acutely retroflexed, and lower down than normal. I replaced and straightened it without much trouble, and her pains immediately ceased. There was great focal distension of the lower bowel, and she admitted to suffering from chronic constipation. This was treated, and she had no return of the uterine trouble. I used no mechanical support afterwards.

HÆMORRHOIDS IN A CHILD AGED 3½ YEARS.

This case came under my notice about three months ago. The mother said that the boy complained of pain at the seat, and on looking she had discovered a small lump at the anus. On examination a well-marked congested pile was found protruding at the left margin. This was the size of a small cherry. Immediately behind it was another, about a third as large. The only discoverable cause was persistent constipation, which had existed from birth. This has been treated, and the piles have disappeared.

HYDRONEPHROSIS.

The patient, Mrs. S., æt. 40, mother of seven children, was suddenly attacked with renal colic. Three days afterwards an oval shaped elastic tumour was detected in the left side of the abdomen. This enlarged slowly during the next two days. I had made preparations to aspirate it on the following morning, but on arrival found her quite comfortable and the

tumour gone. During the night she had passed half a chamberful of urine, and with it the calculus, which had caused the trouble through becoming impacted at the lower end of the ureter and damming back the urine. As she had had previous attacks of gravel and renal colic, the diagnosis was comparatively simple.

This is the only case of hydronephrosis I have met in private practice, and I have only met with three in hospital.

A CASE OF TUBERCULOSIS OF THE INTESTINES AND MESENTERIC GLANDS, WITH SECONDARY INVOLVEMENT OF THE LIVER.

By T. L. ANDERSON, M.B. MELB., FREMANTLE HOSPITAL, W.A.

J. G., æt. 41; admitted June 17th, 1898.

Symptoms.—Ill last six weeks with attacks of abdominal pain; constipation constant and severe; occasionally has attacks of vomiting; appetite fair; pain located in epigastrium and about umbilicus; does not radiate through to back; not increased by taking food; more or less constant, and never any severe paroxysms. No hæmatemesis; no jaundice; has never passed blood by bowel; no trouble with micturition.

Previous History.—Sailor by occupation; always well and able to work. Had an attack of pleurisy on left side eighteen years ago: was not aspirated. Has lost two and a-half stone in weight last two months.

Family History.—No cancer or tubercle in family as far as he knows.

Examination.—Markedly cachectic in appearance; wasting of whole body; abdomen somewhat full and prominent. Lungs: Fair percussion note and vesicular murmur on both sides of chest. Heart: Sounds are clear in all areas. Abdomen: Full; rounded tumour in epigastric region; dull on percussion; definite outline, and moves very slightly with respiration; painful on pressure; immediately below and to left of umbilicus a second smaller rounded tumour to be felt; resonant on percussion over this part, painful on pressure; no fluid in abdominal cavity: urine examined at different times, and nothing abnormal discovered.

Course.—Temperature ran an irregular course. Constipation severe and obstinate. Vomited on three occasions. Some œdema of the feet for five days before death. Thirty-six hours before death complained of sudden severe abdominal

pain; had vomiting, and lay with knees drawn up. Increase in swelling of feet, rapidly spreading up legs. Severe collapse, radial being hardly felt, but was quite conscious. Abdomen very distended and boardlike, moving very slightly with respiration, and acutely painful on slight pressure.

Diagnosis.—This rested between malignant disease hydatid or tuberculosis of the mesenteric glands, but without an exploratory laparotomy absolute diagnosis was impossible. On the onset of the acute and fatal symptoms it was considered probably a case of rupture of a hydatid cyst.

Post-mortem.—Lungs: Both very adherent to chest wall; visceral layer of pleura thickened and sending fibrous cords into lung tissue; a very small cretaceous nodule at left apex; no tubercles in lung or on diaphragmatic surface. Heart: Small and flabby; valves normal. Abdomen: Large quantity of brown fluid in peritoneal cavity. Liver: Adherent to diaphragm over a considerable area; on section, pale and anæmic; a large tubercle about size of a mandarin orange in left lobe; many small tubercles scattered through the organ. Spleen: About twice normal size; soft, but contained no tubercles. Mesenteric glands: Whole chain enlarged and matted together, closely investing the abdominal aorta; the enlargement was due to the deposit of tuberculous material. Intestine: Numerous ulcers and tubercles were found in small bowel; one very chronic ulcer, with thick edges, and almost encircling the bowel, had ruptured into the abdominal cavity, producing a septic peritonitis and causing death.

Tuberculosis of the intestine may occur in three ways:—

1. As a primary affection.
2. By infection from the peritoneum.
3. By infection from the lungs by swallowed sputum.

Primary intestinal tuberculosis is a very rare condition in adults. Only one case was noted in 1,000 *post-mortems* on tuberculous adults (Osler). It is much more common in children, and this is easily understood when we consider the frequency of intestinal disorders in children and the fact that their diet consists so largely of milk which may be infected with tubercle. In support of this are Sims Woodhead's figures showing that in 127 fatal cases of tuberculosis in children the mesenteric glands were affected in 100.

The usual symptoms associated with the condition are irregular diarrhœa, colicky pains and

moderate fever. In the present case constipation was marked and severe. The occurrence of diarrhœa depends on the presence of a catarrh with the ulceration. In some cases hæmorrhage may occur, and occasionally it has proved fatal. In cases of ulceration about the cæcum the symptoms may very closely simulate an attack of appendicitis, especially as in some cases the symptoms may abate and then recur a few weeks later, still further obscuring the diagnosis. Perforation, as in this case, may occur into the peritoneal cavity, or partial healing and cicatrization, with some occlusion of the lumen of the bowel, occur in other cases.

A CASE OF PUERPERAL ECLAMPSIA WITH HÆMATURIA.

BY A. JEFFERIS TURNER, M.D., LOND.,
BRISBANE.

THIS case, which I saw some three years ago, seems worthy of record on account of the clear evidence which it presented of vascular engorgement of the kidney in a puerperal patient suffering from eclampsia.

I was called to see Mrs. S. on May 24th. She was 19 years of age, and in her first pregnancy. She believed herself to be seven months pregnant; but, from my examination, I inferred that the pregnancy had lasted over eight months. The fetal heart could be heard distinctly. She had enjoyed particularly good health during her pregnancy, except during the past two weeks when she had had swelling of the face and legs, and headaches. There had been no complaint as to vision. For the last week she had been frequently vomiting. Nevertheless, she had appeared pretty well the day before, and had gone out to visit her mother.

The first convulsion occurred at 7.30 a.m., and she had had four seizures before I arrived soon after 10 a.m. She was then drowsy, but conscious, complaining of headache, the face bloated, and the legs œdematous. A fifth seizure occurred while I was present; it was of severe type, accompanied by cyanosis, but not long-continued. The urine withdrawn by catheter was high-coloured, free from blood, but contained much albumen. The os admitted the forefinger only, and there was no sign of commencing labour. Dr. Love was called into consultation. Before his arrival I injected 40 grains of chloral per rectum. At his suggestion gr. $\frac{1}{4}$ of morphia was injected hypodermically, and two pints of saline solution into the

bowel. Another very severe convulsion occurred at 11.30 a.m., and the morphia, saline solution, and chloral were repeated. By evening she was much better, and was given jalap and salines, which acted freely.

During the next week she was kept in bed, principally on milk diet, and had no more convulsions, but complained of headache, for which she took occasional doses of chloral. The urine was abundant, but contained $\frac{1}{2}$ albumen.

On June 3rd she was evidently getting worse. For the last two days there had been a large quantity of blood in the urine, which was almost port wine-coloured, and contained $\frac{3}{4}$ albumen, but no casts. This was verified by passing the catheter. I therefore determined to induce labour without further delay. The os was easily dilatable, and, with the help of a Champetier de Ribes' bag, the first stage of labour was got over; but there being no pains of any strength, delivery had to be effected by forceps. After expressing the placenta there was free hæmorrhage for a short time, soon checked by compression and ergot. The child was healthy.

The next morning patient still complained of headache. A large quantity of urine was withdrawn by catheter, dark with blood; albumen, $\frac{1}{2}$. On the second morning headache had disappeared, and the urine appeared free from blood. On the 6th urine still free from blood; albumen, $\frac{1}{2}$. On the 9th only a trace of albumen could be found. The mother made a good recovery, and was in excellent health some months later. I have not heard of her since.

The profuse hæmaturia present in this case points, I think, to a condition of vascular engorgement of the kidneys almost as clearly as though these had been open to ocular inspection. That there was no inflammation of the kidney surface was, I think, shown by the rapid and complete recovery after delivery. Furthermore, it may perhaps be assumed that the albuminuria was due to the same cause as the hæmaturia, acting with a less degree of intensity.

The Dublin Journal of Medical Science, January, 1899, refers in a lengthy paragraph to a paper, "Tearing Away of the Bladder from its Pelvic Connections," by Dr. F. Bird, and published in *Australasian Medical Gazette*, in May, 1898.

TO MEDICAL MEN.

Wanted immediately an unmarried Qualified Assistant, with view to partnership, to live in the house. Communicate with Dr. PAYNE, Thames, New Zealand stating age, etc., etc.

ABSCESS OF LIVER—(I.) SECONDARY TO APPENDICITIS. OPERATION—RECOVERY. (II.) PROBABLE CASE OF SO-CALLED TROPICAL ABSCESS OF LIVER—OPERATION—RECOVERY.

By J. A. THYNE, M.B., C.M., EDIN.;
L.R.C.P., M.R.C.S. ENG., MILLICENT, S.A.

CASE I.—R.R.F. *et.* about 35; married; nullipara; of slender build, and markedly nervous temperament. Resident in Millicent district, and until present illness always enjoyed excellent health. On morning of 30th November, 1896, turned suddenly ill. Had pain in right side of abdomen; afternoon of same day vomiting occurred. At this time no diarrhoea and no constipation complained of. Pain continued till next day—1st December—when patient was first seen. The vomiting continued at intervals for two or three days. The locality of pain at this time was indefinite, being more or less general over abdomen, with marked tenderness of same distribution. It was not at this time specially located in the right iliac fossa. Temperature raised several degrees. Pulse frequent.

In a few days from beginning of illness condition improved, and visits were discontinued for a day or two. Patient got worse. Visits were resumed and continued almost daily for about one month. At this early stage pain at base of neck on right side or about right shoulder was for some time complained of. Tympanites soon became marked, and continued for many days. In a few days from the commencement of illness the pain by degrees was definitely localised in the right iliac fossa. A swelling (apart from the general tympanitic distension) also occurred there with dullness, and the prominence of the anterior superior iliac spine was obliterated in marked contrast to that of the opposite side.

The swelling extended upwards from the iliac fossa along the line of the ascending colon, and was distinctly visible and palpable in the right hypochondriac region as well as in the fossa. It was markedly tender.

Pain on micturition was also a prominent symptom, and on several occasions patient was unable to pass urine, and relief had to be obtained by catheter.

At an early period in the case, before the advent of local phenomena, as an aid to diagnosis an examination was made *per vaginam*, but nothing abnormal in uterus, appendages or bladder, or in pelvis generally, was discovered.

The difficulty as to micturition continued during several days, and passed off gradually. Typhoid rash was looked for but none found. Patient was kept on liquid dietary, and only occasionally an anodyne and sedative given. Diagnosis of appendicitis was made. Though aware of the views of surgeons of the American school with reference to cases of this kind, which do not in a few days show signs of improvement, I did not see sufficient grounds in this case to adopt early surgical procedure.

Obstinate constipation became a marked feature of the case, so much so that evacuation of bowel had to be obtained by an occasional aperient, rectal enemata failing to produce much relief. During a considerable period of the case no medication of any kind was resorted to, and I explained to patient that I did not particularly desire her to swallow drugs merely for the sake of doing so.

The treatment, indeed, was mainly symptomatic.

At the end of third week patient was much emaciated. A doughy swelling still persisted in the caecal region; temperature kept up. Pulse frequent about 125 per minute, feeble and of low tension; thrush appeared in mouth. Suppuration being suspected a small incision, under chloride of ethyl spray, was made through skin over the most prominent part of the swelling a little to inside of anterior superior spine. Aspirator needle introduced and pus searched for, but none obtained. Local operative procedure postponed, but anticipated would be necessary later, as notwithstanding negative result I still strongly suspected that suppuration had occurred—the swelling persisting and high temperature also. Large poultices were now applied, but as time went on no additional sign of presence of pus appeared: on the contrary, the swelling gradually disappeared, as also did the tympanites and constipation. Some diarrhoea now occurred.

Pulse and temperature became normal about thirtieth day of illness. Toward end of this period a parotid bubo developed on left side, went on to suppuration, and was subsequently evacuated.

Patient was last seen at this period of her illness on 15th January. She gradually gained strength and went about again, but stated, when she at a later period again came under observation, that she never felt really well, and that during this interval of about three months between the first and second stages of her illness, she had a pain over the lower ribs on the right side. This pain never entirely left her all this time, and was present night and day. She

kept thinking it would go away, but it persisted and gradually got worse. Lying on either side aggravated the pain. She had been to the seaside for change of air, but on account of the increasing distress and feeling of illness she was again brought under observation about the 15th of April. At this time her temperature was raised, but not to marked extent at first; pulse frequent. On local examination nothing abnormal could be detected in or over right lung, nor was there at this time anything unusual in the surface appearance of the part, *i.e.*, in the right infra-axillary region. In a few days a swelling appeared over the painful area—over the tenth and eleventh ribs in the mid-axillary line. This swelling rapidly increased in size and became red. There was no apparent enlargement of the liver in any direction, and no obliteration of the intercostal spaces even, until the period referred to.

On the 24th April patient was brought into Millicent with a view to surgical procedure. On this day the skin over the summit of the swelling assumed a necrotic appearance, and slight oozing occurred.

Next day (Dr. Gribble, of this town, administering chloroform) I laid the swelling freely open, and a copious discharge of very foul pus of greenish-brown colour resulted; in quantity about one pint.

The subcutaneous tissues were sloughing and putrid. The tenth and eleventh ribs were locally bare of periosteum, and pus was discharging above and below the eleventh rib. About one and a-half inch of eleventh rib was resected with bone forceps. A channel leading forwards, downwards, and inwards, in the direction of the epigastric region was not over curiously explored for fear of breaking down adhesions, but at subsequent dressings this was gently dilated with dressing forceps, and a free discharge took place from it.

The wound cavity was dressed with iodoform gauze. At first extremely foul it gradually cleaned as sloughs were cast off. Patient's temperature rapidly fell to normal, and she made a good recovery. No dead bone came away from either tenth or eleventh ribs, but for about three months after operation a small sinus, about one inch in length and of diameter of an ordinary wax match, lead down to the part of the tenth rib, which had lost its periosteal covering. Finally this closed, and the patient has since been free from pain and in excellent health up to present date (January, 1898).

The pus was submitted to microscopic examination, and the presence in it of fragments (microscopic) of broken-down liver tissue

distinctly ascertained. The presence of the characteristic liver cells with granular and fatty change might be taken to settle definitely the question previously doubtful as to whether the case was one of hepatic or of subphrenic abscess, either of which, *per se*, was a possible sequel of the disease of the vermiform appendix from which the patient was believed to have suffered. No trace of hydatid structures, macroscopic or microscopic, was seen. The abscess pointed below the level of the pleura, and the necessary surgical procedure was simple enough. The presence of adhesions rendered unnecessary the application of sutures to the liver. The liver, indeed, was not identified during the operation, nor was it over curiously looked for.

On the general subject of abscess of liver it is unnecessary to make any comments of an extensive nature. It may be latent for a considerable period. In this case, up to within a few days of operation, local phenomena were, with the exception of pain referred to, characteristic by their absence. No alteration in size of liver was ascertained. Until microscopic examination of the pus was made, the diagnosis from my point of view was uncertain as between hepatic abscess or subphrenic abscess.

With either as a *local* primary condition, the other condition might develop secondarily.

Either as a *local* primary condition might arise secondary to mischief in the vermiform appendix—in the case of hepatic abscess by conveyance by way of portal vein of infective material; in the case of subphrenic abscess by continuous extension upwards from the appendix of inflammatory mischief between the lateral abdominal wall and the peritoneum. In my opinion this was a case of hepatic abscess secondary to appendicitis.

CASE II.—A short reference may be permitted to the following case, as being not altogether foreign to the subject of this communication. It is made entirely from memory. A few years ago, early in the year 1895, when I was stationed at Addah, Volta River district, Gold Coast Colony, West Africa, the case now referred to came under my notice.

Kwamin Yebbuah, a native of Ashanti, and member of the Gold Coast Civil Police Force, had symptoms pointing to pleurisy in the right infra-axillary region—loss of breath, sounds on auscultation, etc. Aspirator introduced to determine and to ascertain nature of fluid present. About two drachms of thick pus obtained with difficulty. State of affairs explained to patient, and he elected for operation. This was unavoidably delayed a few days, as I got an attack

of malarial fever at the time, but operated almost immediately after it was over. No other surgeon was available, but Mr. S. J. Hood, of the Customs Department, rendered efficient service as administrator of chloroform.

Incision of soft parts over area indicated by signs of presence of fluid. Part of rib resected. This was probably the ninth rib. Thereafter index finger passed into a cavity perfectly smooth, and apparently lined by serous membrane as far as exploring finger reached. This cavity had a soft, smooth, bulging inner wall. The outer wall was immediately internal to the ribs. There was no outflow of pus, nor was there any inrush of air following entry to this cavity.

I naturally thought I was into the pleural cavity, but as this was where I had had expected to find the pus, and also as there was none to be seen or felt, and in addition no inrush of air followed the opening of the space, I felt considerably disconcerted. I neither felt or saw anything of the lung, so far as I knew, during the entire operation. However, with the knowledge that there was pus about the region of operation internal to the thoracic wall, I passed a probe—or forceps or director, I forget which—through the smooth, bulging inner wall; struck the pus readily; enlarged the opening, and passed finger into a large pus-containing cavity. The pus was thick and glutinous, and could indeed be brought away on the finger; but, so far as I remember, its appearance was not otherwise specially characteristic of hepatic origin. The finger moved freely in this large cavity, and still there was no inrush of air. As already stated, I felt neither lung nor liver; the pus-containing cavity was, I daresay, too large to make that in itself a matter of surprise.

In all probability the case was one of hepatic abscess pressing upwards on the diaphragm and base of right lung, and so displacing the lung upwards, but not actually opening into the pleural sac. I could feel no adhesions in the smooth-lined empty space into which I first entered after the rib section. They may have existed higher, beyond the reach of examining finger, or, if the case were really one of hepatic abscess (possibly becoming subphrenic also), the pressure on the diaphragm upwards and outwards may have been so great as to thrust the lung up and obliterate the space between the costal pleura and the pleura on the diaphragm. I did not attempt to stitch the walls of this cavity (probably the pleural cavity) before evacuating the abscess. If it must be confessed, I have no recollection of the

advisability of so doing having occurred to me at the time. So far as I know, no harm resulted from any such omission. On previous occasions, when I had opened into pleural sac, a pneumo-thorax at once occurred; but according to a comparatively recent statement of Macewen, of Glasgow, such need not necessarily occur, and the pleural sac may be freely opened without any collapse of lung and inrush of air following thereon. (*Med. Record*, September 17th, 1897.) He also stated that a free opening into pleural cavity was less likely to lead to a pneumo-thorax than a small one; the cohesion of the two smooth pleural surfaces being usually sufficient to prevent this. I am disposed to believe that the bulging inner wall of space No. 1 (first entered and empty), and forming an outer wall to space No. 2 of entry and pus-containing, was the diaphragm, and that the pus (therein contained was that of a hepatic abscess, or of a subphrenic abscess secondary to abscess of hepatic origin.

There did not exist at this station sufficient appliances to conduct a microscopic examination of the pus, even if one had desired to do so.

There is, perhaps, a possibility in the case which may be referred to, viz., that during the resection of the rib the costal pleura had been accidentally detached from the ribs over an extensive area, and that the finger had got between the costa pleura and the thoracic wall. I can only say that such an accident has never occurred on the few other occasions on which I have resected a portion of rib, and that the cavity into which the finger passed was absolutely smooth with no hindrance or obstruction to free movement therein, and that over an extensive area. I do not know if such an accident is at all likely to occur, but, in any case, I certainly am not disposed to think it occurred with me for the reasons given. Patient showed signs of collapse while on table. Enema of brandy administered. He rallied, and was removed to his room in a mud house, which was sufficiently evil smelling to cause him to complain about it. The West African negro, as a rule, is indifferent on the subject of evil odours. Cavity was dressed at time of operation and afterwards with iodoform gauze. Some days after operation his temperature, which had been satisfactory, rose to about $104\frac{1}{2}^{\circ}$, but he did well. Wound closed and he was discharged cured, and returned fit for duty exactly two months from the date of his being put on the sick list.

"Tropical" abscess of the liver is fairly common on the Guinea coast. Manson puts the

mortality at seventy to eighty per cent. A timely operation undoubtedly gives better results. The larger the abscess is, the more likely is it to be single. This large collection of pus occurred on the right side. For the rest I will leave the case to the judgment of those who may read it in your columns should it ever get there.

CASE OF CEREBRAL TUMOUR.

By G. A. FISCHER, B.A., M.B., CH.B.,
ADELAIDE.

SPECIMEN SHOWN BEFORE THE SOUTH AUSTRALIAN
BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MISS ANNA S—, *æt.* 13½, was brought to me for advice on the 3rd of last December, on account of deafness, which had come on rapidly during the preceding fourteen days.

During the past twelve months she has had pains in the back of her head, also down her spine—these have become much worse during the past four to five months, and she now does not seem to be able to hold up her head—and has had occasional early morning vomitings without apparent gastric derangement.

Menstruation began at 11 years of age, been fairly regular till seven weeks ago, occasionally has had dysmenorrhœa, has now amenorrhœa.

She had always been a healthy girl till twelve months ago, save for an illness of some three months duration with somewhat similar symptoms to the above, two years ago, as the result of severe fright.

When first seen by me she was somewhat delicate-looking, walked with difficulty, swaying in all directions, and would often have fallen had help not been at hand, but not tending to fall towards any particular direction, was quite deaf to all external sounds, but appeared to have a small amount of bone conduction for tuning forks of low register in the right ear, complained of pain over the whole of the back of her head and upper part of her spine; no retraction of the head.

Eyes: Right external strabismus, weak and insufficient action of both external recti, also of all the muscles supplied by the right third nerve, also of both orbicularis oculi muscles, horizontal nystagmus fairly constant, much more marked when patient looks to the right or left side, pupils react normally, no hemiopic pupillary reflex.

Vision of right eye $\frac{1}{60}$. Vision of left eye $\frac{1}{3}$, partly. Field of right eye almost nil, of left eye concentrically contracted, but no hemiopia. Colour sense normal.

Ophthalmoscopic examination showed intra-ocular neuritis, but not very pronounced, somewhat more marked in the right eye, no evidence of choked disc on either side.

Ears: Nothing abnormal detected by the naked eye; does not complain of tinnitus; no apparent affection of internal or middle ear.

Reflexes: Superficial reflexes elicited, plantar only feebly; deep reflexes not obtained. Nothing abnormal detected on examining the shaved head, no painful spot elicited or difference in percussion note detected on percussing the skull. Nothing abnormal detected in chest or abdomen. Sensation unaffected. Urine contains neither albumen nor sugar. Appetite good. Sleeps well.

Diagnosis was founded on the bilateral auditory affection, and partial bilateral facial implication, and suggested, according to Gowers, a tumour in the upper part of the pons varolii, possibly in the middle where the two facial paths cross, or a tumour in the situation of the corpora quadrigemina.

Dr. Cavanagh Mainwaring saw the case the following day in consultation, concurred in the diagnosis, and watched the case throughout with me.

Under the internal administration of hydrag. perchlor. potassm. iodid. and potassm. bromid. for a month the patient appeared to be gradually improving, and then showed signs of retrogression. Operative interference was now suggested as affording her a possible chance, and because we entertained the suspicion that a hydatid was at the bottom of it all, as the patient had lived a good while in the south-east—whence have come the most of our cases of hydatid disease—and as two of the relatives with whom she had lived had already been treated suffering from this disease, one of them having had the parasite in his brain, and whose case has already appeared in these journals.

Dr. J. C. Verco saw the case in consultation with me soon afterwards, and concurred in the opinion as to the locality of the probable tumour.

The parents gave their consent to operation, and the patient, early the following morning, was removed to a private hospital. She took a fair amount of light nourishment, and appeared to be in *statu quo* till mid-day, when, without apparent cause, she suddenly became collapsed with Cheyne-Stokes respiration, and cold and almost pulseless, and it was thought her end was near; however she rallied towards evening, and remained fairly well till the chloroform anæsthesia was begun at 8 a.m. the next morning, when Cheyne-Stokes respiration

again replaced her previously normal breathing, and her pulse continued firm throughout, artificial respiration was resorted to. On her recovery ether anæsthesia was substituted, but the same symptoms again established themselves, and the operation was consequently performed with as little anæsthetic as possible.

The highest point of the superior temporal ridge of the right side was selected, as suggested by Professor Watson, for the trephine hole, Dr. Cavanagh Mainwaring operating, Dr. Verco and myself assisting. On removing the disc of bone the brain was found to be very tense, but pulsating. The aspirating needle inserted entered a large cavity, and clear fluid was withdrawn. A Sinus' forceps was then passed by the side of the needle, and the brain substance separated sufficiently to allow of the insertion of the little finger. No hydatid skins were to be felt, but on all sides the walls of the distended right ventricle; no tumour could be felt. As the condition of the patient prior to and during the operation, had been far from favourable, no further search was made for the tumour and the wound closed in the usual way. Patient died fifteen hours later.

Autopsy disclosed distension of both lateral ventricles, and growing from the corpora quadrigemina (the superior pair) forwards through the transverse fissure into the lateral ventricles, pressing on the roof of the iter and both optic thalami, a tumour, soft, lobulated, and of a reddish colour, and of the size of a medium sized walnut, apparently a glioma. (Subsequent microscopic examination of a section of the tumour showed it to be a glioma).

AN UNUSUAL CASE OF MULTIPLE FRACTURES OF ONE LIMB.

By AYLMER A. MACFARLANE, M.D., L.R.C.P. EDIN., MEDICAL REFEREE THE MUTUAL LIFE INSURANCE COMPANY OF NEW YORK, SYDNEY.

ON my way out from England, as surgeon on the "S.S. Narrung," of the Blue Anchor Line, the following accident took place between the Cape and Adelaide, which seems to me worth recording on account of the many interesting features it presents:—

On August the 23rd of last year Miss X., a saloon passenger, and having a deck cabin, was going to her cabin after dinner to fetch some music, and by mistake opened the door of one of the coal bunkers, and stepping in, fell to the bottom of the bunker on to an

iron floor, a distance of twenty feet (this was accurately measured the next day). She lay there about a quarter of an hour before her screams attracted attention.

On being brought up to her cabin she was able to tell me she felt sure she had broken her left leg. On examination I found her left foot and ankle very much distorted, and on cutting off her stocking I found the whole foot very much bruised and swollen, so much so that a correct diagnosis was made with great difficulty. However, I came to the conclusion there was a—

1. A Pott's fracture,
2. A simple fracture of the lower third of of the shaft of the tibia.
3. A split for about one inch up the internal malleolus.

There were three or four superficial abrasions of the skin, but on the most careful examination, I could detect no internal or other injuries.

The patient was now in a state of most profound shock—the eyes dull, the pupils dilated, the temperature subnormal 97.5, the respirations slow and irregular, sighing and scarcely perceptible, and the pulse at the wrist almost imperceptible, very weak and rapid, the limbs cold and numb; in fact, I was very doubtful whether she would live through the night. Owing to her collapsed condition, it was impossible to give an anæsthetic to set the limb.

The next morning I found the patient somewhat better; but, owing to the great amount of swelling, I was obliged to remove the splints. Unfortunately, we were getting into bad weather, the log recording: "Heavy gale, heavy sea, the vessel rolling heavily." So, in spite of the swelling, I was obliged to put the limb in splints again, bandaged somewhat loosely.

The same afternoon the patient had a relapse of all the former symptoms, which lasted for about six hours, during which time her condition was most critical. Six days later we arrived at Adelaide, so I took the patient in an ambulance to the North Adelaide Private Hospital, and placed her under the care of Dr. J. A. G. Hamilton. The next day he had the limb put under the Röntgen Rays, and the skiagraphs showed the following state of affairs:—

1. The os calcis and astragalus were driven up, and split up both the tibia and fibula.
2. The internal malleolus and part of the shaft of the tibia were split off in an oblique direction.

3. An oblique fracture of the lower third of the shaft of the tibia.
4. An oblique fracture of the fibula, two and a half inches up the shaft.
5. Fracture of the first metatarsal bone.
6. The other metatarsal bones have all been crushed together.

The limb was eventually put up in a box splint for five weeks, and then put up in plaster of Paris for three weeks.

Before the patient left the hospital Dr. Hamilton examined the limb again under the Röntgen Rays, with the following result:—

"The ankle joint is really good, the fractured malleoli being in good position. She has a good joint, but the foot is the trouble; it has lost its power 'as a lever of the first order,' caused no doubt by injury to the metatarsal bones."

I have seen the patient myself since in Sydney. There is fairly free movement of the ankle joint, but the foot is very stiff. There is no shortening, and I think she will get fair use of the limb, but there will always be stiffness at the instep.

My reason for publishing the case is to point out the following points of interest:—

1. The large number of fractures occurring in one limb.
2. The fact that none of the fractures were compound.
3. The entire absence of any internal or other injuries, considering the severity of the fall.
4. The great amount of shock produced (which would probably have been fatal had not the patient been of a robust constitution).
5. The good results obtained, considering the amount of injury the limb was subjected to.

INTERCOLONIAL MEDICAL CONGRESS OF AUSTRALASIA.

BRISBANE, QUEENSLAND, 1899.

The fifth session of the Intercolonial Medical Congress will be held in Brisbane during the winter months of 1899 (exact date not yet fixed).

The following gentlemen have kindly consented to act in their respective colonies as local secretaries:—South Australia, Benjamin Poulton, M.D., M.R.C.S., North Terrace, Adelaide; Victoria, Geo. Addington Syme, M.B., F.R.C.S., Collins Street East, Melbourne; New South Wales, Philip Ed. Muskett, L.R.C.S., L.R.C.P., Elizabeth Street, Sydney; New Zealand, Professor John H. Scott, M.D., The University, Dunedin; Tasmania, Gregory Sprott, M.B., General Hospital, Hobart; West Australia, Athelstane J. H. Saw, M.B., Cantab., St. George's Terrace, Perth.

CASE OF TOTAL OBSTRUCTION OF THE BOWEL, LASTING THIRTY-FOUR DAYS.

By W. FELL, M.D., OXON., WELLINGTON, N.Z.
 READ AT THE ANNUAL GENERAL MEETING OF THE
 NEW ZEALAND BRANCH OF THE BRITISH
 MEDICAL ASSOCIATION, HELD IN AUCKLAND
 JANUARY 4TH, 1899.

THIS case, a melancholy one in many ways, is instructive as giving a limit to human endurance far more extended than is commonly supposed.

W.C., aged 32, a lemonade bottler, married, with two children. He had complained to me for over a year of wind rolling about inside, and uncomfortable feelings, also of a tickling cough; repeated examinations revealed nothing. About the beginning of September he felt so weak and ill that he gave up work for a rest, got rapidly worse, diarrhoea and sickness began; suspecting that the diarrhoea was possibly obstructive I once more examined per rectum, and thought I could detect a growth high up; tried to introduce a long tube, but failed. A further examination under chloroform, with Dr. James, convinced us that there was a growth causing obstruction about the sigmoid. I sent him into the hospital to have colotomy done; he remained there a week; total obstruction set in, enemata had no effect, the abdomen became swollen and tense, and he could take no food; being told that a cure could not be promised, he refused to consent to operation, and came out to die at home. He came home on the 5th October, having taken no nourishment of any kind since the 2nd, and very little for some weeks before that. I urged operation with every argument I could think of, but he persisted in his determination to die. By the 7th he was suffering intense pain, and no flatus was passed from that time until his death. I began hypodermic injections of morphia, and this in quantities of about two grains a day he had up to the end. At first he had severe vomiting of green and coffee ground liquid, after a week this stopped; he washed his mouth with water, and occasionally drank a little, also a little ginger-beer, but he expressed no desire for anything else. On the 10th the stainings that one is accustomed to see only on the dead body began to show on his distended abdomen; these increased, until at the end of a fortnight his whole abdomen and thorax were blue and mottled like the dependent parts of a corpse. A hard swelling began to appear at the angle of the jaw on the right side, and grew to the size of an orange,

when it broke down and suppurated, discharging freely up to the time of his death, and acting as a further drain on his remaining strength. All the while his mind was perfectly clear, he was thoughtful for others, helped himself to his water, and gave as little trouble as possible. He never once complained of hunger. Emaciation was rapid, and by the end of the third week he looked like one of the Indian famine subjects. His urine was clear, free from albumin, sp. gr. 1.023. Distended coils of bowel were always to be seen working and twisting about under the thin blue skin. His pulse was soft and highly compressible, it gradually got quicker, reaching 110 by the end of the month; after this it slowed down, and as he got perceptibly feebler his pulse averaged about 80. About the twenty-fifth day of starvation the lividity began to spread to his arms, and by the thirtieth it was universal, except for his face, which consisted of a thin skin of a yellow parchment-like character stretched over the bones. On most days he vomited a little, and sometimes the retching would be very troublesome, lasting most of the day. On the twenty-fifth day the swelling under his right ear began to soften, soon after it broke, and discharged a quantity of offensive pus; nearly a teacupful must have drained away. By the thirtieth day I noticed his left pupil widely dilated, and the left eyelid drooped so that he could hardly see out of the eye; but the cornea remained bright and clear.

He still took an interest in everything, and inquired about a yacht race in which he knew I was sailing. By the thirty-second day of his starvation he was perceptibly failing, and on the thirty-fourth he quietly died. Taking the illness all through it was the most remarkable case of patient endurance and calm acceptance of the inevitable that I have ever witnessed; he would allow no one to sit up with him at night, and his one idea was to give as little trouble as possible.

I made a *post-mortem*, and found an impermeable malignant stricture of the bowel at the sigmoid flexure; the bowel above measured eighteen inches in circumference, and contained some liquid fæces and an enormous quantity of flatus; the stomach and small intestines were empty and contracted.

Cases of total obstruction of the bowels of a longer duration than this have been observed, and fasting men have endured starvation for longer, but I doubt if such a combination of total obstruction and starvation and intense suffering has ever before been endured for thirty-four days by a man previously reduced

and weakened by such a disease as cancer; and the lesson I would draw from it is that people deprived of food suddenly, either by being shut up in a mine or in a boat at sea, who die as a rule in from five to eight days, die not from starvation, but exhausted by the mental suspense, and if they would face the position with the fortitude this man did they might survive a month or more.

THE USE OF FORMALIN IN PUERPERAL SEPTIC CONDITIONS.

Mrs. O., August 16th, 1898, was delivered of a living child after a difficult instrumental labour. She had been confined once previously, when the head became impacted, and the doctor under whose care she was then had been obliged to perform craniotomy, the mother making a slow recovery. On this occasion all went well for two days; there was a full supply of breast milk, and I confidently expected a normal recovery. Suddenly the temperature rose to 105°·6, with intense headache. Antipyrin reduced it, and the next day it was normal, and all seemed well again. On the fifth day it rose to 106°, and I syringed out the interior of the uterus with several quarts of izal, washing out a quantity of thick stringy, offensive, muco-purulent discharge. Two hours later temperature was 102°, next day normal, rising again to 105° in the evening, when the syringing was repeated with a like result. This continued for the next ten days; once there was a slight rigor, twice there was vomiting and diarrhoea. About twelve hours after the syringing the temperature always began to rise. She seemed to be losing strength and going down hill, so on the thirteenth day I determined to try the effect of formalin. I had never heard of its being used in such a case, but it seemed to me that what was wanted was some continuous uterine disinfection, and I thought the penetrating fumes of the formalin might supply this. I packed the vagina loosely with strips of linen soaked in formalin solution 5i. to 6 ozs. The application caused a little smarting, but was not otherwise complained of. I left it in for twelve hours; the temperature came down at once, and from that time the case ceased to cause any anxiety. Patient and nurse both felt convinced that the cure followed directly on the use of the formalin. I have thought it worth while to bring to your notice this case because, though these septic conditions are now happily very rare, one may occur any day in the practice of any of us. We are at the mercy of our nurse, who often

examines the case before our arrival, and, as I am convinced was done in this instance, infects the patient before we have come upon the scene. The treatment, as far as I know, has not been described before, and is, at any rate, worthy of a further trial. I may add that curetting in such a case, where one is certain that there is no placenta or membrane left behind, is distinctly harmful and dangerous.

CHOLECYSTOTOMY.

M., aged 40, a highly neurotic man, with a history of repeated attacks of biliary colic; he once had slight jaundice, but it was never well marked. Great tenderness in the region of the gall bladder, and intense pain during the attacks. After trying olive oil in large quantities, with morphia to relieve the pain, I decided to operate. Drs. Collins and Fyfe assisted me. I found the gall bladder embedded in a mass of omentum and adhesions; with considerable difficulty I freed its lower surface, and could then feel that it was small, thick, and filled with a gall-stone. I opened the gall bladder at the end, and drew out a stone the size of a Spanish olive, weighing 75 grains. So far the case was a perfectly ordinary one, and presented no features worth recording. It is only the subsequent treatment to which I wish to invite attention.

Feeling satisfied that the ducts were patent, that the walls of the gall bladder were sound and had not been much handled, I thought I would try what has been called the "Ideal Cholecystotomy," as practised by Küster, Czerny, Klingel, Roux, Winkelmann, and others. Accordingly I closed the gall bladder completely by sutures, returned it into the abdomen, and closed the wound, leaving a drainage-tube in the parietal wound for twenty-four hours as a precaution and more out of deference to the authorities than because I really thought it was required. There was never any sign of bile in the dressings; the temperature remained normal throughout; the stitches were removed on the eighth day, and the man was up and about in three weeks. I think, considering how frequently a troublesome, if not incurable, fistula results from the ordinary practice of inserting a drainage tube into the gall bladder, the "ideal" method is deserving of more frequent trial in suitable cases.

Dr. A. L. Levy's article on "Successful Operation for Congenital Umbilical Hernia in a Child One Day Old," which appeared in the *Australasian Medical Gazette*, July, 1898, is noticed in the *Post Graduate*, December, 1898.

A CASE OF ACUTE SPREADING TRAUMATIC GANGRENE—AMPUTATION—RECOVERY.

COMMUNICATED BY H. J. W. BRENNAND, B.A., M.B., CH.M., SYD., HOUSE SURGEON, SYDNEY HOSPITAL

D.L.W., *æt.* 36, admitted to Sydney Hospital on 26th January, 1899, under Dr. W. H. Goode.

Patient had been thrown from his horse about six hours previous to admission. He was a strong, healthy man, with a good previous history.

On examination a compound fracture of the left ulna and a comminuted fracture of the left radius were found, both bones being broken in their middle thirds. The end of the lower ulnar fragment projected from a wound an inch long, and the bone and soft parts were thickly covered with dust from the road. Patient had his shirt sleeves rolled up at the time of the accident, and was dragged a few yards. Under ether the wound was thoroughly irrigated with carbolic lotion, and the fractured bones set. Some difficulty was experienced owing to a portion of a muscle being caught between the fragments and to there being fairly brisk hæmorrhage. The wound was dressed with sterilised gauze, and the arm put up on an angular splint. During the night the pain was intense, and the patient was unable to sleep. The arm and hand swelled considerably, and the dressings were changed twice. At 6 a.m. on the 27th January the fingers were noticed to be somewhat blue and cold, and the upper arm was brawny and painful on pressure. At 8 a.m. emphysema was noticed as far as the middle of the upper arm, and the radial pulse was somewhat feeble. At noon the forearm was greenish black, and several bullæ had formed. Emphysema had now spread to the shoulder and over the Latissimus Dorsi and Trapezius. Temperature, 103°.4; pulse, 120; respirations, 36. Pain still very great. At 3 p.m. several free longitudinal incisions were made in the arm, but no pus escaped, and there was little or no hæmorrhage. During the night the gangrenous odour became very marked, the radial pulse was absent, and a line of demarcation was visible at the level of the Deltoid insertion. At 10 a.m. on the 28th January, sixty-eight hours after admission, after consultation with Drs. W. Chisholm and Fiaschi, it was decided to amputate the arm. The temperature then was 103.8°, and pulse 136. Under ether a circular amputation was performed, and the humerus divided about one inch below the

neck. The flaps were not sutured, and sterilised gauze dressings were applied every six hours. At 4 p.m. temperature fell to normal, pulse 82, respirations 24, and the patient was almost without pain. The emphysema of the shoulder and back continued to decrease, and by 10 p.m. had almost disappeared. The albuminuria which had been present for two days ceased, and has not reappeared since. During the first three days after the operation there was slight oozing from the wound.

Examination of the fluid exudation from the gangrenous tissues made by Dr. Isbister, showed the presence of numerous micro-organisms, among which were many resembling the bacillus of malignant œdema, but their identity was not proved, as no cultures were made.

4th March.—Since January 29th patient's temperature has been normal, and he has not had a bad symptom of any kind. The wound is almost healed, and the man's general health is excellent.

CASE OF RUPTURE OF LIGAMENTUM PATELLÆ.

BY GEO. PALMER, M.B., ET CH.M., MELB., ARARAT, VICTORIA.

READ BEFORE THE BALLARAT DISTRICT BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

J. B., 59 years of age, is a big burly farmer of about 15 stone weight, and he stated, on inquiry, that whilst passing from one room to another on a slightly higher level he suddenly struck the crown of his head against the top of the doorway and jerked his left knee, which he then felt give way from under him, causing a feeling as if the leg could not be prevented from going backwards. He did not fall down completely, but having support from the sides of the doorway was able to keep himself up till assistance arrived. The leg was quite helpless, and not realising what had happened he thought he was "paralysed." The joint gradually became greatly swollen, and the external surface much discoloured; there was severe local pain and tenderness across the front of knee-joint. As the swelling did not disappear, and pain continued, patient then consulted me, October 3rd, 1898, a week after the accident. On examining the joint I found it greatly distended with fluid, which, from the peculiar bruised and discoloured appearance of the surface of the joint, seemed due to extravasated blood; the patella was absent from its usual site, and was lying quite flaccid and loose up on the lower end of the shaft of the femur.

It could be readily moved to and fro, or up and down, and could be partly turned on its edges. The edges of the semi-lunar cartilages could be made out on pressure, the external cartilage being slightly displaced over the articular surface of tibia. The fingers could be thrust into the hollow between trochlear surface of femur and head of tibia, i.e., between patellar attachment of ligament and its insertion into tibia. On standing up patient could not bear any weight on the leg, fearing constantly that the limb would slip backward.

On the following day (October 4th) I aspirated the knee-joint, drawing off about 16 oz. of blood-stained fluid. The facts previously noted could then be made out more distinctly. There was no indication of any crepitus, no sign of a lower fragment, and the patella had apparently the same size as its fellow. The patella could be brought down to its normal position, but could not be maintained there readily.

The case was treated as for fracture of patella, first by drawing down the patella with strapping applied above the bone and to the back splint, and subsequently, when patient called for freedom, by dextrive bandages and light back splints to prevent flexion. Patient was intolerant of rest, and sixteen miles from medical attention, and he, therefore, disturbed his bandages frequently. However, on December 23rd, 1898, he could walk without a stick, though not confidently, and with aid of a stick could walk freely and with only slight limp.

The patella is still 1 to 1½ in. higher up than its fellow, and on flexion the outline of the articular end of femur can be made out.

From the facts described above, viz., the displaced patella (upward) the hollow of the lig. patellæ, the mode of causation (muscular action), the large amount of blood effused, normal size of patella, and absence of crepitus or lower bony fragment, I think the case justified the diagnosis of ruptured ligamentum patellæ, and is sufficiently uncommon and interesting to warrant bringing under your notice.

Since writing the above patient can walk about quite freely, but feels the left knee-joint somewhat weak.

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NOTES ON THE BUBONIC PLAGUE, HONGKONG EPIDEMIC, 1894, WITH PROFESSOR KITASATO'S PRELIMINARY NOTICE.

By J. F. MOLYNEUX, M.R.C.S., L.R.C.P., NING POO, CHINA, AND A FEW REMARKS ON QUARANTINE, BY JAMES A. LOWSON, M.B., C.M. EDIN., HONG KONG.

EARLY in June I received a wire from Dr. Lowson (Acting Superintendent, Government Civil Hospital, Hongkong), asking me to proceed immediately to Hongkong under engagement to the Government. At the time of receiving this telegram affairs in Hongkong were in a most alarming condition. The Colonial Surgeon had at his back only Dr. Lowson and two volunteers (Surgeon-Major James, of the Medical Staff, and Surgeon Penny, R.N.). The gentlemen in private practice in Hongkong were prohibited by the unknown nature of the risks of the malady, and by their patients' wishes, from offering their otherwise willing services, and the active workers were very hard pressed. Europeans were being attacked, one excellent officer of Her Majesty's had already lost his life, and a condition very like panic was abroad among the Europeans. Under the circumstances I proceeded immediately to Hongkong, and there had an excellent opportunity of studying the bubonic plague in all its stages. I was exceptionally fortunate in living with Dr. Lowson (whose experience is unique) and with Professor Kitasato, so that my opportunities were very favourable, and to those gentlemen I am indebted for much information, and many demonstrations, which, but for my fortunate location, I should sadly have missed. Everyone who has seen one case of the plague is very certain to write a book about it, for the field is open, and theory is hard to explode. I propose to plainly state a few facts gained from my personal experience as one of the eight men who had to combat the disease, and was an official through the epidemic.

On my arrival in Hongkong I found that the hospital arrangements for plague patients were far more satisfactory than anyone would have supposed possible, considering the swift nature of the visitation and the unknown terrors which environed it. Anyone acquainted with Hongkong can appreciate the frightful possibilities this outbreak suggested.

The hospital ship "Hygeia" was lying a quarter of a mile from shore. This excellent institution (usually in use as a smallpox hospital) was of admirable service as a refuge for European patients. The soldiers attacked, and

the Japanese doctors and other civilians, were here cared for.

Westward, at the end of the town of Victoria, is an outlying spot named Kennedy Town, little visited, and remote from the crowded population. The roads to this retreat were guarded by armed police; no one passed the cordon without a permit, and in this very suitable spot by the sea-shore the main plague hospitals were situated, and some two miles farther on the dead were buried. It was fortunate that buildings were already in existence here, which it was possible to turn into hospitals, viz., the new police barracks and the new cattle dépôt. Besides this accommodation, large mat-sheds were erected, and of these mat-sheds one cannot speak too highly. They can be erected with inconceivable rapidity, their cost is unimportant, and at the close of an epidemic they can be destroyed by fire—lock, stock and barrel.

Patients arriving at the Tung Wah Receiving Hospital, in the city, were either kept under observation by the European medical man, or, if undoubted plague cases, were immediately sent on by litters to Kennedy Town. The Civil Hospital also forwarded all cases, as soon as diagnosed, to the plague hospitals. The cattle dépôt was, in sympathy with Chinese prejudices, left under the immediate care of native doctors; but, be it noted, this establishment was strictly under European supervision, four orderlies from the navy and army overlooked the cleaning operations, and were always there to see that the place was kept sweet, and that ample disinfectants were used. This hospital was under the diurnal supervision of one of the Government British doctors. So much for the housing of the sick.

As soon as a case of plague was discovered in a house by the search parties acting under the police, that house was entered and the infected part disinfected and lime-whited. Should either of the medical officers certify the house unfit for habitation, a notice to that effect was posted on the walls, and within twenty-four hours it was entered by the "white-wash brigade" (men from the garrison). The cock-lofts were torn down, all fittings and furniture left turned into the streets, where bonfires blazed constantly, fed by this debris. The house was then disinfected with chlorine, and lime whited throughout, and then entirely closed and barred.

Definition.—The bubonic plague is a specific bacillary infectious disease, characterised by the presence of a definite bacillus (*Bacillus Kitasonensis*), by inflammatory (generally sero-sanguineous) affections of the lymphatic

system, severe nervous symptoms, and necessarily epidemic in nature.

Causes.—After witnessing Professor Kitasato's experiments, and from what I have observed personally, I have not the slightest doubt that the actual cause is the bacillus *Kitasonensis*.

Predisposing conditions to its development are overcrowding, dirt, and probably a moist and increasing warm atmosphere. Ventilation and sunlight are inimical to its development; but none of the predisposing causes will generate the bacillus *de novo*, it must be introduced into a medium of culture from without.

Period of Incubation.—Remember we are attempting for the first time to describe this disease according to modern method, and at present it is to all intents and purposes a two months' old disease; that is to say, it is two months only since it came under medical observation. So far the men who know most about it (I am modestly referring to the half-dozen doctors who have had to fight with it daily) give the incubation period from three to five days; but in the Kennedy Town Hospitals I had a case which will be more or less historical as definitely lengthening the possible period of incubation. A prisoner from the Government Gaol was brought in, suffering from bubonic plague. He had been ill, according to history, for three days, and his condition bore out such history as being probably correct; but for more than nine days before any symptoms of indisposition presented themselves, he had been a close prisoner in a sanitary institution under careful observation, and, as far as human probability goes, beyond the reach of direct or indirect infection. This must be taken for what it is worth; but, as far as our present light guides us, I take it that nine days cannot be regarded as too long a period during which to keep a suspect under surveillance, who has been in an infected city or in an infected ship. The British Navy here have instructed their officers and men engaged in plague work not to approach H.M. ships until a period of nineteen days has elapsed since their approximation to an infected area or individual. Were I a law-maker, I should give ships fourteen days' quarantine from the day of departure from a proclaimed port.

Before proceeding, however, to my clinical observations, allow me to touch upon the plague in its aspect to other ports. The all-important question, as to whether or no the scourge which has played such havoc in Canton and

Hongkong is likely to be a source of immediate anxiety by its nearer outbreak, I can lay down no absolute statement that here or there you are secure; but, in giving you a few of my recent experiences and observations, can place you in a position to fairly judge for yourselves. At present the danger in Hongkong is that of a daily increasing population returning after panic to a limited house accommodation. The efforts of the police may be futile to prevent overcrowding, and, with overcrowding, I cannot see why Hongkong should not have again a large daily number of admissions. At present (July 9th) the number of admissions to the hospitals, though in themselves not alarming, are sufficient to cause grave anxiety should an over-packed immigrant band take up speedy residence in centres where the plague is practically still in existence.

When I arrived in Hongkong there were many daily admissions to hospital; a day or two later thirty-three were admitted in one day, and there were 47 deaths, so that I had ample opportunities of considering and studying the malady itself, and the quite recent Hongkong history of its outbreak. It is very hard to say that the plague broke out upon any particular day, for the question of diagnosis was not solved in the beginning of May, and doubtless some cases occurred which were registered under other headings; but from the extreme fatality of the trouble, and the large numbers swiftly attacked, there is no doubt in my own mind that the plague was not epidemic many days before it was publicly known and officially announced by the Hongkong authorities. As a matter of theory one hears in Hongkong of people who knew all about it months before May 1st, and men will tell you how they can prove its existence long before it was recognised. The fact remains that it was not recognised, and that nobody now can prove that any case occurred prior to Dr. Lowson's visit to Canton. The fact that upon his return he immediately found plague cases in Hongkong by no means proves that they existed in any serious numbers before his very prudent visit of inquiry to a city in which it was known to be epidemic.

The people who are wise after the event in this matter, and are stimulated in such wisdom by a yearning for notoriety, state that they knew all about it long before the approximate date alluded to. All I can say is that the terrible scourge I have been privileged to witness could not have been long in existence in a closely-packed city so well supplied with intelligent medical men, as Hongkong is,

without attracting swift attention; and if people knew all about it before, why, in the name of common sense, did they keep the matter secret when its divulgence was so essential an attribute to the public weal?

However, when the plague did commence in Hongkong, it found the city by no means prepared for the visitation, and surely never has a matter demanding the united efforts of intelligence, science, and zeal, been made the subject for the display of such feebleness in high places. Such political bungling and such petty bickering among men who should have forgotten self for the threatened commune.

Dr. Ayres, the Colonial Surgeon, and Dr. Lowson, the Acting Superintendent of the Government Civil Hospital, were the only men upon whom the Government had a direct claim. These gentlemen were supplemented by Surgeon-Major James, of the Medical Staff Corps, and Surgeon Penny, of H.M. Navy, both of whom volunteered for the work.

There was, as is well known, a strong feeling against Western methods of treatment among the Chinese, and pressure was brought to bear upon the Government to allow the old glass-works to be used by Chinese doctors. The horrors of this most unsuitable building need no recounting here. I assisted at its disinfection and partial demolition, and can only say that it was about the most unsuitable building that a short-sighted policy could have handed over practically to Chinese management. Under European men the place would have been bad; under the Chinese it became one of the foul blots of nineteenth century history.

To return to the clinical aspects of the disease,—

You will generally find among Chinese a pathognomonic tongue—for they will not reach you (save in quarantine examination) before the malady is fairly developed. The tongue is then centrally brown (as if tobacco or opium stained), with frequently scarlet narrow edges. In an advanced stage the tongue is very dry—in fact semi-dryness is an almost constant condition. In severe cases it is almost black, and then the teeth are covered with sordes, and the lips dry and cracked. Protrusion is not too easy; a plague patient does not extend his tongue far, probably because the glands under the jaw are tender, if not markedly enlarged, and partly because he is too apathetic to do anything vigorously.

The skin is generally, on first inspection, dry and burning; you do not need the thermometer to assure you that there is fever. In later

stages, during lysis, one sometimes sees the face as wet as in acute rheumatism.

The conjunctivæ are often bile-stained. In from two to four days there is generally marked congestion—a precursor to delirium. As I write there are three men within a dozen yards of me—one five days, the others fourth-day cases. In the former an acute delirium is passing away after thirty-six hours of cerebral excitement, with inability to pass water (a common condition). The other two, fairly synchronous as to inception, are commencing to lose cerebral balance. The fourth and fifth days are days of sorrow and nights of watching (though in this malady the day of peace of mind for the careful attendant comes only with convalescence).

The temperature is generally, on admission, about 103° or 104°. For the next three or four days it may rise above 105°, and may slightly fall below this stage, according to antipyretics employed; but the fall is important. Brandy and quinine are the two drugs which appear to me most efficacious as regards temperature. Neither are ever sufficiently prescribed, through a pardonable pusillanimity which want of knowledge of the malady engenders.

I think that naturally and generally the temperature lasts until the seventh day of the fever, when it descends by lysis (never by well-marked crisis in my experience), having reached normal by perhaps another seven days of easy and irregular stages. It generally (after possibly the adventitious interference of an unhealed bubo) does not materially rise again, excepting with lung or septic sequelæ.

Bubo.—Here is a sign of great importance as a differential and an exact guide—I have never yet seen a case of plague without a bubo either there already or threatened by a hyperæmic gland—found *post-mortem* when no superficial indication by sense of sight or touch obtained.

In malaria, influenza, bilious remittent, and several other conditions pathological, you shall find the fever of plague, the tongue of plague, (not quite, but very like it), the injected conjunctivæ of plague, but never the typical bubo. Here is the secondary proof positive, the primary one being the presence in the blood of Kitasato's bacillus. Out of one hundred cases you will find it to be a femoral enlarged gland in roughly 70 per cent. of your cases. I do not think that there is any preferential site as to right or left side.

The next most common site is the inguinal region, the next the axilla, the next the sub-maxillary region. I have seen one primary

bubo in the gland under the swelling of the biceps in the arm, and I have seen two in the popliteal space, none at the bend of the elbow; the posterior cervical glands are co-existent often enlarged, the cause being often syphilis, and sometimes secondary plague deposits. There is rarely much tenderness in more than one gland. I believe the first gland infiltrated suffers the most, this often suffers complete necrosis; other glands may be later on affected, but multiple glands in different regions are the exception, and not the rule. The nature of the glandular enlargement is occasionally masked by the wide-spreading œdema around the infiltrated organ. I have seen *post-mortem* an axillary gland no larger than a filbert with surrounding deep œdema extending down the lateral thoracic wall as far as the level of the nipple. Superficial inflammatory œdema is not uncommon; the gland, after incision, even when there is no suppuration, has an appearance of advanced lifelessness and wholesale destruction. Sometimes it can be lifted as an entire slough from its site and surroundings. Healing after incision or extirpation is a weary process. There is a tendency to phagedænic sloughing around and beneath the unhealthy overhanging dark purple skin edges of your external wound.

I do not believe that the pain of an unopened plague bubo in any way compares with the agonising experience of the sufferer from an ordinary suppurating gland, the result of lymphangitis or inflammation. The throbbing is absent and tenderness on pressure rarely acute.

Constipation.—As a rule, you find that on admission the patient is constipated and there is commonly a tendency to constipation throughout. Should diarrhœa of a peculiarly severe type with great fœtor exist, the case rarely recovers, but diarrhœa is the exception and not the rule in the disease.

Retention of urine during the first few days, and during the period of high temperature and delirium, is exceedingly common. The catheter must be at hand in every ward, and great watchfulness exhibited in the matter, for water retained by the patient is very liable to set up severe forms of cystitis.

Urine.—The urine frequently contains albumen, but only in small quantity. Such traces, due to typical cloudy swelling of kidney, the quantity of urea is largely increased.

Rash.—There is certainly no specific rash. The patient is commonly badly bitten by mosquitoes, and during the fever the bites take on a dusky purple tinge, owing to the marked tendency to local hæmorrhages. This at first

was regarded as a possible skin eruption associated with the specific fever. I understand a Chinese coolie pointed this out to Dr. Lowson in Canton.

Again, a pustular eruption occasionally, I may say frequently, is found; but careful inquiry always reaches its cause, which is the recent application of a vesicant by the Chinese practitioner. Dusky ecchymoses beneath the skin have been pointed out to me, as belonging to the plague, by some missionary doctors. They are the result of pinching (an exaggerated form of massage in high favour among the native followers of Confucius). Sudamina rubra is very common, and I have noticed a few cases of herpes during high temperature, but this disease (bubonic plague) has no period of eruption, for it is not an eruptive fever, and upon this point there is not the slightest shadow of doubt. I absolutely affirm that any eruption seen during bubonic plague is adventitious, and has nothing whatever to do, as a pathognomonic point, with the disease itself.

Sequelæ.—The lungs are very rarely affected, save as regards the hypostatic pneumonia belonging to prolonged pyrexia and recumbent position.

Heart.—The heart, I take it, requires careful attention throughout, and during apparent convalescence must be very carefully watched. Sudden death is by no means infrequent during the first week of apparent convalescence. Cardiac dropsy I have not seen, but we have not yet a convalescent of a month's standing. During convalescence the first apex sound is always more or less feeble, and the apex point of maximum impulse is generally outwards, slightly beyond the normal. Valvular mischief I have not noticed directly associated with the disease.

Local hæmorrhages.—Here we have a well-marked tendency to such hæmorrhages. I have seen them superficially arising from trivial causes, and *post mortem* they occur irregularly almost anywhere, though in perhaps less than 25 per cent. of the people attacked.

I have seen such hæmorrhages in the ocular conjunctivæ, submucous coat of stomach; in the kidney (below the capsule); on the upper surface of the liver; on the surface of the spleen; in the mesentery (very large and extensive); rarely in the small intestine; in the ovaries in the uterus; in and around the lymphatic glands; in the meninges of brain and cord, and in three cases in the pons varolii; also, and very important, *under the visceral pericardium.*

No doubt the tendency to hæmorrhages of a purpuric character in the skin has led some observers astray as to the possibility of a distinct rash.

Local inflammations: tendency to lymphangitis and septicæmia.—The tendency to lymphangitis is remarkable. After the appearance of a well-marked plague bubo one frequently finds some trivial abrasion, and often no discolourable injury at all has set up a most violent lymphangitis in a chain of vessels quite distinct from that in which the plague bubo has matured. I have been more impressed by the tendency to pus formation in this sickness than almost by any other point; so much so, that I have often allowed a bubo to go unopened (wrongly) rather than risk the septicæmic trouble that so often follows upon a break in superficial tissue continuity.

Eye troubles.—Result from local hæmorrhages as indicates conjunctivitis, iritis (due, I fancy, to septic condition of semi clot), hypopyon, etc., are by no means uncommon.

Every pregnant woman who has been brought into hospital has aborted, and all of these have died with only one exception.

Examination of the blood shows great diminution in the quantity of hæmoglobin, in some cases going as low as 15 per cent. Examination for bacilli is mentioned in Professor Kitasato's paper annexed. Leucocytes in blood are increased in number.

The following remarks on the question of "Quarantine, and how to deal with an Epidemic of Plague," are by Dr. J. A. Lowson.

PLAGUE IN RELATION TO PUBLIC HEALTH.

If any country is in a good sanitary condition, it has little or nothing to fear from plague. This means it must essentially have good water supply, good drainage, good food supply, and sanitary dwellings. If these conditions are not present, then quarantine must be employed to keep the disease out. By quarantine I mean the regulations enacted and carried out to prevent the introduction of epidemic disease into any country or port. I take it for granted that the Health Authorities are prepared with isolation hospitals, disinfectants, and a staff ready to act at a minute's notice. Given these premises, one has to consider quarantine from three points in relation to—

- I. The inhabitants of an uninfected port.
- II. The passengers on an infected ship who wish to land.
- III. Cargo.

From a humanitarian point of view, as well as in justice to the inhabitants of an uninfected port, the authorities are bound, by demanding the strictest observation and detention of vessels from a port in which the disease is prevalent, to prevent the introduction of plague. This can only be done by insisting on an observation period. If I were the medical adviser to any port or colony where sanitation is not in a perfect condition, I would recommend the following regulations:—

- I. (a) Any vessel arriving in any port from an infected place should be put under observation for twelve days, the period to commence from the time she left the infected port. (The period of incubation has been proved to extend to at least nine days, and to err on the safe side I would lay down twelve days as the time for observation.)
- (b) If no illness simulating plague is discovered on board at the end of this time the ship should be granted pratique.
- (c) If, however, plague or any suspicious case has occurred during this period, the observation time must be extended as is thought necessary by the authorities.
- II. In relation to the passengers.
- (d) All passengers who wish to disembark must be compelled to undergo the twelve days' quarantine either on ship or quarantine ground. If at the end of observation period no disease is found existing they should, on landing, be subjected to a thorough disinfection, as well as all luggage and personal effects.
- (e) As an addendum to Rule C, all infected passengers or members of crew should be immediately conveyed to the isolated hospital or observation ward.
- III. In relation to trade.
- (f) During period of observation no communication should be permitted between the ship and the shore.
- (g) Under no consideration should a permit be given to land cargo unless the ship's manifest shows that none was taken on board at the infected port. This does not apply to mails and specie, which should, however, undergo disinfection.
- (h) If a case of plague occurs on a ship which has not taken cargo from an infected port, less stringent regulations may be adopted with regard to the landing of cargo. The danger here is exceedingly small.

These regulations should be strictly carried out, more especially if the ship carries emigrants.

From personal knowledge of Japan, Shanghai, Chinese treaty ports, Singapore, Australia and Vancouver, I can advise the adoption of the above regulations. Ports more than twelve days' voyage distant from an infected district I consider to be perfectly safe, if ordinary precautions be used. I think that in the places already named the slight loss to trade consequent on such regulations being properly carried out is to be materially preferred to any chance of a possible outbreak of bubonic plague. How much the present outbreak has cost the colony I do not think will ever be known.

On the outbreak of an epidemic of plague in any port information of the adoption of such quarantine regulations should be telegraphed to the infected port, so as to prevent any undue loss to shipowners, consignors, or consignees.

HOW TO DEAL WITH AN EPIDEMIC OF PLAGUE.

On this question I give my opinions from a personal experience, which in some particulars has been of rather a sad character. It must be remembered that at the commencement of the epidemic we were dealing with a disease in fighting which on scientific lines we knew little or nothing. Up till now there has been absolutely no literature on the subject, from a sanitary point of view. Our mistakes at present I will not enter into, but will at once say what ought to be done.

I know it is difficult to carry out all my suggestions, but efforts for suppressing the disease ought to be made on these lines:—

- I. (a) Procure hospital accommodation, or, at the very least, isolation. It is no good commencing search parties, &c., unless a place for isolation is available.
- (b) Provide cemeteries at once, with a large staff of grave-diggers. Cremation ought to be carried out where possible, as being at once more sanitary and less laborious.
- II. Organise search parties for house-to-house visitation. This must be rigorously and conscientiously carried out, and every person suffering from the disease, or showing suspicious symptoms, should be at once removed to hospital or observation wards respectively. The other occupants of the house ought to be transferred to an observation encampment, and the house treated as mentioned below.

III. If the disease has evidently settled down in one district, immediately take steps to proclaim an infected area. Wall it in, and arrange accommodation for, medical inspection of, and, if possible, isolation of the inhabitants of the infected area.

IV. A large stock of disinfectants (carbolic acid and quicklime, &c.) must be procured. If not at hand, hand hydrants will be found most useful also.

V. A large disinfecting party must be organised, whose duty it must be to thoroughly cleanse every house and its contents in which a case of plague occurs. The proclaimed area must be attacked as time and circumstances allow. Every house (in which a case has occurred) outside the infected area must be cleansed as follows:—

- (a) Careful washing of clothes, floors (if of wood or stone) and furniture with a 2 per cent. solution of carbolic acid.
- (b) After removal of contents of house the walls must be thoroughly washed down with the same solution, or preferably quicklime.
- (c) In case of floors being of earth, or covered by earth, dirt or filth, this has got to be carefully treated with quicklime, mixed up thoroughly with same before removal, then taken out to sea, or treated by fire or disposed of in some other suitable way. Certain articles in the house will be best treated by fire, others by removal and disinfection. All wooden floors in the affected district where numerous cases have occurred must be destroyed by fire. Good highly-polished wooden floors need not be destroyed.
- (d) Drains, closets, cesspools, &c., must be thoroughly flushed and disinfected, and all dead and decaying animals (rats, dogs, &c.) and vegetable matter removed and treated with carbolic acid or fire.

VI. To prevent spread of disease every effort should be made to improve the sanitary condition of houses which are not infected by insisting on cleaning and free use of disinfectants.

The following are the precautions adopted in the Government hospitals:—

Attendants are not allowed to look after the sick when they feel ill; nausea is the indication for leaving off temporarily. They are told to be scrupulously clean in person; any cut or

abrasion on any part of person is to be carefully treated and looked after. At first they were ordered to use eucalyptus or carbolic on their handkerchiefs, but where no overcrowding of patients occurs, and fresh air is abundant, these were not insisted on. (No attendant in the European hospitals was attacked by the disease.) As a matter of course the free use of disinfectants all over the hospitals (carbolic acid or permanganate of potash) was indicated. Fæces were treated freely with quicklime in a careful manner, and the excreta removed to sea. (Burning would be preferable if it could be easily carried out, but all along we have been handicapped by want of adequate assistance). All patients' clothes, being inexpensive, are burned. Other precautions of a minor importance were carried out.

PROCEEDINGS OF BRANCHES.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY meeting held at the University, Adelaide, February 23rd, 1899.

Present: The President (Dr. Swift), Drs. Way, Marten, A. E. Wigg, Lendon, J. C. Verco, J. Evans, Cleland, H. M. Evans, G. C. Hayward, Poulton, Morgan, Michie, Symons and hon. sec. (Dr. W. T. Hayward); Dr. Isbister, as a visitor.

Dr. POULTON showed a case in which he had excised the wrist owing to disease of the joint following an injury.

Minutes of last meeting read and confirmed.

Adjourned discussion on Dr. J. C. Verco's paper on "Amœbic Pulmono-hepatic Abscess" (p. 66), read at the last meeting.

Dr. W. T. HAYWARD considered Dr. Verco's paper one of the most valuable of the many excellent ones presented to the Society by that gentleman. Dr. Verco had proved conclusively that cases of amœbic disease originated in Australia, and were not necessarily imported from tropical countries; he had also described the case in a manner that might be termed classical. From the case under discussion, and from others recently recorded in the *Australasian Medical Gazette*, he thought that very little could be hoped for from purely surgical treatment. From the post mortem appearances in Dr. Verco's case it was evident that treatment of the abscess could have been of no avail. The only chance he could see to obtain a beneficial result was to attack the disease vigorously from within. What drug should be used further experience only would show. The cases of actinomycosis lately reported by Dr. Marten, when, after vigorous surgical treatment, success only resulted when huge doses of iodide of potassium were administered should stimulate them to adopt similar treatment in cases of amœbic disease.

Dr. ISBISTER related the cardinal features of cases of the disease that had occurred in the Sydney Hospital. He discussed the possibility of attacking the disease by incision into the cœcum and injections of drugs in solution.

Dr. J. C. VERCO, in replying, said that he thought that there was no member present who, on finding evidence of an hepatic or pulmo-hepatic abscess, would hesitate to incise it, though he admitted that no case of successful operation had been recorded; but he was not at all sure that some of the cases of hepatic abscesses followed by recovery after incision that had been brought before the Branch were not of amoebic origin. In any case that he might have in the future, if he found no benefit from the administration of iodide of potassium, he would try large doses of quinine.

Dr. J. C. VERCO read his paper on "Chronic Morphinism Treated by Bromide of Sodium." (See page 89.)

Dr. WAY would have been more satisfied as to the result of this case if a longer time had elapsed since the recovery. He doubted whether the successful result was due to the bromide of sodium, and was inclined to attribute it to the fact that the patient had been treated at a private hospital under strict surveillance. He mentioned a case where apparent complete recovery had occurred in as short a time as in Dr. Verco's case without the use of drugs, though the patient had experienced considerable agony in the process of recovery. From personal experience, under other circumstances in the use of bromides, he was rather sceptical as to their potency.

Dr. W. T. HAYWARD said that the apparent difference between the cases of Drs. Way and Verco was that in the former recovery was accompanied by considerable agony, while in that of the latter the sensibility was so dulled by the use of the bromide that the discomfort was greatly ameliorated. He doubted if the intercurrent gastric attack was due to the bromide; it was more probable that it was caused by the largely reduced quantity of morphia taken. The same might also be said with regard to the mental disturbance. He mentioned two cases of chronic morphinism in which the drug had stopped altogether, which were immediately followed by epileptic seizures, which in one case proved fatal.

Dr. CLELAND discussed the question of the effect of bromides in cases of chronic morphinism and alcoholism, the conditions being similar in both cases. He attributed their beneficial action to their effect on the dendritic processes in the cortex cerebri.

Dr. J. C. VERCO in reply, said he would never attempt to treat a case of chronic morphinism in private. He could not say that his patient would never relapse. He had no doubt as to the beneficial effects of the bromides, and he was obliged to Dr. Cleland for his interesting remarks on the *modus operandi*.

Dr. WAY, in moving "That Dr. J. C. Verco be appointed a special delegate of the Branch to the parent Association," alluded to the approaching visit of Dr. Verco to England, and said that members felt that they could not allow him to depart without expressing the great admiration they had for him, and appreciation of the services he had rendered to the South Australian Branch since its inception. He was sure that all members would heartily join in wishing their friend *bon voyage* and a happy and interesting time in the old country, and a safe return.

Dr. LENDON seconded the motion, which was supported by other members in eulogistic remarks.

The PRESIDENT put the motion, which was carried by acclamation.

Dr. VERCO, in a happy and graceful speech, thanked the members for the compliment paid him, and for their kind and flattering remarks.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE third annual meeting of the members of the British Medical Association (New Zealand Branch) opened in the University Buildings at Auckland, on Tuesday, January 3rd, 1899, at 8.30 p.m. Present: Drs. Scott, Campbell, Pabst, Lewis, Robertson, Clegborn, Beattie, Fleming, Haines, Saunders, Makgill, Dawson, Walker, Rowley, Bewes, McDowell, Bedford, Neil, F. M. Purchas, Murray, F. W. King, Fell, Mason, Pollen, Gibbs, Truby-King, Smith, Craig, Laing, and Mr. Gilruth (Veterinary Surgeon).

In the absence of Dr. Fell (the President), Dr. SCOTT (the President-elect) occupied the chair, and explained that the business of the meeting would be postponed till the following day, when several other members coming from the South would be present.

Dr. SCOTT welcomed those members who were present, after which the minutes of the last meeting were read and confirmed.

Dr. HOPE LEWIS read a paper on "Seventy-one Cases of Abdominal Section," on which a discussion followed, Drs. CLEGBORN, SAUNDERS, ROBERTSON, and CAMPBELL taking part.

Dr. LEWIS also gave a clinical demonstration of a case of tumour of orbit with proptosis of eye; also, a case of lymphadenoma.

SECOND DAY, JANUARY 4TH.

At 2.30 p.m. on Wednesday, January 4th, the business was continued.

The annual report and balance-sheet was considered, and the GENERAL SECRETARY explained that the item, "Fixed deposit at the Union Bank, £52," represented the amount received from the *New Zealand Medical Journal* with the interest accrued on it, and therefore it could not be considered that they had a credit to the Branch of £65. What they really had was £65—£52, which left £13. In the event of the New Zealand journal being established again, he presumed the Council would refund that money to it. It was perhaps an error on his part to put it in that way—credit to the Branch, £65—for it might give them the idea that they were accumulating money, which they were not doing; the 4s. per head for current expenses just about covered the expenses.

Resolved—"That the annual report and balance-sheet be adopted."

ELECTION OF OFFICERS.

The GENERAL SECRETARY explained that at the annual meeting held in Wellington last year it was decided to abolish the office of Secretary to the Council, and in the event of the President of the Branch or the President-elect of the Branch being unable to attend, it was decided to make the appointment of Chairman of the Council. By-laws to that effect were sent home for the consent of the London Council but he regretted to say they had not yet been returned, so they were still in a quandary—the same quandary they acted on last year. He had received a letter from the London Council, notifying him that the matter would be considered at the Council meeting of October last, but on referring to the minutes of that Council meeting in the *Journal*, he found it had not come up, so that it was not clear whether they were entitled to elect a Chairman of the Council or not. They had got out of the difficulty last year by having their President always presiding at the Council meetings.

In reference to the appointment of President-elect for the year 1900, the GENERAL SECRETARY said that

in the event of the invitation of the Canterbury Section to hold the next meeting in Christchurch being accepted, he had been instructed by that Section which he represented to nominate Dr. Walter Thomas as President-elect of the Branch for the year 1900. It was also proposed to arrange the date of the meeting for the third week in February.

Resolved,—“That Dr. Walter Thomas be elected President-elect of the Branch for the year 1900, and that the fixing of the date of the meeting be left to the Canterbury Section.”

Resolved,—“That Dr. Barnett be asked to continue his editorship of the *Australasian Medical Gazette*.”

Resolved,—“That the present Parliamentary Secretary, Dr. Mason, be re-appointed.”

Resolved,—“That the appointment of Chairman of the Council be left in the hands of the Council until a reply was received from London.”

BUSINESS REFERRED FROM THE COUNCIL.

THE HAGEY INSTITUTE.

In reference to the motion passed by the Council—“That the subject be referred to the general meeting, with the recommendation that a notice be sent to all the medical men in the colony advising them that the Council intend referring this subject to the General Medical Council in London, should any case come before their notice of a member of the profession attaching himself to such an institution.”

Dr. FLEMING suggested that the words “and allied institutions” should be added, for he pointed out these institutions never last very long, and probably by the time the notices were out the Hagey Institute would have died a natural death. He thought the addition of the words “and allied institutions” would make the motion a more permanent one.

Resolved,—“That the motion passed by the Council, with the addition of the words ‘and allied institutions,’ be carried.”

Dr. PABST read a paper on “A Case of Gastric Ulcer,” on which a discussion followed.

Dr. SCOTT asked Dr. Pabst whether he closed the peritoneal cavity or left it open, or left it temporarily so.

Dr. SAUNDERS said that he thought the case which Dr. Pabst had described was interesting to all medical men. He was pleased to say that such a case had never fallen to his lot, as cases of this character were surrounded by all kinds of difficulties. The chief feature in the case described which rather surprised him was the fact that there was no collapse whatever. With regard to the intercurrent attack of bronchitis on which Dr. Pabst had asked them to make suggestions, he saw no connection between the two unless there happened to have been some chronic trouble with the lung. He had often noticed when people were below par and they had any trouble with their lungs, that the weak spot seemed to accentuate that for the moment; but apart from that, he could see no connection between the two. It appeared to him that the chief point in the treatment of cases of that nature was not to move the patient at all, but to do whatever had to be done practically on the premises. The case was full of interest to him personally, and although he had had no experience of a perforated gastric ulcer, he had no hesitation whatever in saying that he would operate on the patient at the earliest possible moment.

Dr. POLLEN was sorry that he had not been present to hear the beginning of the paper; but there were one or two points he wished to refer to. With regard to the morphia taking effect after the administration

of chloroform, he thought that was not very uncommon. Chloroform helped the action of morphia wonderfully. As to the attack of bronchitis, he had seen that happen after a long administration of chloroform, but not so often as with ether. He had much pleasure in congratulating Dr. Pabst on the result of the operation.

Dr. MASON said that looking at the major part of the operation, he thought it was marvellous not so much on account of the dexterity displayed as from the fact of Dr. Pabst being able to diagnose the case so well. He had lately had a share in two operations. In one case they did not remove the whole of the stomach, but only different parts of it, and they adopted the method of smothering the end of a suture in the peritoneum, with very satisfactory results, as they found at the *post-mortem* examination. He firmly believed that in both cases the operation was a successful one, and it was only a question of shock. He thought an important point was to pay no attention whatever to temperature, for in cases of severe abdominal operation the temperature did not give the slightest indication of how the patient was going on. He remembered one case in which the temperature remained at 99° for about four weeks after the operation; but, in spite of this prolonged temperature, which they thought was due to septicæmia, the patient recovered.

Dr. PABST, in reply, said: With regard to closing the peritoneal cavity, he preferred to close it, because one could always open it later if necessary. He had had very little experience of chloroform and morphia. He had rather intended to point out that it was a toxic action of morphia that developed after the administration of chloroform, whereas no physiological action of the drug had been noted beforehand. The point he wished to bring out was that with morphia alone the girl had acute pain but no alteration in respiration, whereas the moment chloroform was given the respiration sank to 7. Although one had made numerous *post-mortem* examinations, one did not appreciate the tenseness of the abdominal wall until one opened the peritoneal cavity above the umbilicus. In this case there seemed to be a transverse barrier just above the umbilicus. Although recognising the necessity for immediate operation, one did not think that any time was lost by removing the case to a private hospital, for while the patient was being transferred nurses could get ready instruments and everything necessary for the operation, so that really time was saved. There were a couple of points he had forgotten to mention; one was, that as so often happened in anæmic cases, the patient suffered from perverted appetite. She had been in the habit of eating wheat, and notwithstanding that, and the absence of the usual preparatory treatment for abdominal operations, she made an excellent recovery. With regard to the diagnosis, he did not think he would have been able to diagnose it had he not seen the case twenty-four hours beforehand. The reasoning was simple; it was made by exclusion. If it were not gastric ulcer, what else could it be? If she were left alone she would probably die; an abdominal operation would not add to the risk, and would clear up the diagnosis.

At 8.30 p.m. Dr. Scott, the President-elect, was inducted into the chair by Dr. Fell, the retiring President.

Dr. SCOTT then delivered his inaugural address, at the conclusion of which, on the motion of Dr. FELL, seconded by Dr. ROBERTSON, he was accorded a hearty vote of thanks.

THIRD DAY, JANUARY 5TH.

On Thursday morning the members of the Association paid a visit to the Auckland Hospital, when Dr. Makgill demonstrated the Widal Test and Dr. Scott demonstrated the administration of gas and oxygen.

At 2.30 p.m. Dr. MASON read a paper on "A Case of Malignant Oedema" (p. 58), on which a discussion followed.

Mr. GILBERT spoke on the bacteriological aspect of the case, and illustrated the method of obtaining cultures of malignant oedema on agar.

Dr. FELL congratulated Dr. Mason on the great success he had attained in his case, which must at one time have seemed almost hopeless. He had no wish to cavil at what Dr. Mason had done, but simply for information he would like to mention one point which he did not think had been made quite clear. He would like to ask Dr. Mason why he amputated the leg above the knee. Gangrene of the foot had taken place, therefore it was necessary to lose the foot, but why lose the rest of the leg? He had no doubt there was some good reason, but it was a point which had not been made quite clear.

The question was asked whether the culture was a pure culture of malignant oedema, or whether other bacteria were also present.

Dr. SCOTT said he was very pleased to have been present to hear the paper. Although the case described was a unique case in the colony, still anaerobic microbes did a great deal of mischief, especially in Auckland, by causing tetanus.

Dr. SAUNDERS congratulated Dr. Mason upon the description he had given of this rare disease, and for the benefit of those who had never seen any cases of the kind asked him if he would describe the general symptoms of the disease, and whether there was general oedema.

Dr. MASON, in reply, said he thanked the members for the consideration they had given to his paper. With regard to getting pure cultures, he said of course they had to be conservative of the public health, and the first thing they did was to wash the part, and that in a measure nullified their chance of getting an active or in any way a pure culture of anything; but they had to save their patient, and, as a matter of fact in this particular case, the part was so thoroughly washed that no culture of any organism—at least he hoped not—could have been taken from the surface of the wound. With regard to Dr. Fell's remarks, the reason they amputated above the knee was that, with the exception of a patch of about three inches long and one and a half inches wide on the inside of the thigh, the whole leg was one mass of gas. The limb was actually and virtually dead, and believing that it was a case of malignant oedema, and knowing that the disease was due to an anaerobic organism, after consultation they considered it better to amputate as high up, as near the extremity of the disease, and as near the healthy parts as they could without jeopardising any sound tissues. It was really a lopping off. The boy was put under chloroform, but as a matter of fact was unconscious at the time the first operation was performed. He was *in articulo mortis*, and it was with no hope of saving his life, but possibly with some little pressure on his (Dr. Mason's) part that the operation was decided on, for he considered that in such a case as that, though there was so little hope, an operation could only kill a little sooner, and knowing the character of the organism, there was just a very slight possibility of recovery. On making a *post-mortem* examination of the limb, it was found to be filled with gas, and was absolutely dead. A curious feature in the case was that crackling was found as high up as over the ribs,

but that gradually disappeared. Even at the second operation they had to remove a considerable portion of the dead tissue, and that, in his opinion, justified the reason for taking the limb off where they did. The question had been asked whether the culture was a mixture. As a matter of fact, it always was a mixture; it was only when it had been passed through a guinea pig that a single organism could be got. If it were taken straight from a person who had had his leg rubbed along the ground, there were naturally other organisms present, for it was well known that the surface of the earth was teeming with organisms. Malignant oedema was only one of many, and it was only by passing it through another animal that a pure culture of malignant oedema could be got, or perhaps the same result might be obtained by shaking it up and filtering it. With regard to the general signs of the disease, he thought there could be no mistaking it. One got a history of a recent accident of a healthy person. There was a large exposure of soft parts, and although everything had been done to make the part aseptic, within twelve or thirteen hours it became gangrenous, and there was crackling, and soon after one got the smell of malignant oedema, which there was never any difficulty in recognising again. There was no general oedema; it was a question of collapse. As soon as the organism began to work fully, the patient simply became unconscious, and had a low muttering delirium. He thanked the members for the patient hearing they had given him.

Dr. FELL read a paper on "Three Cases of Surgical Interest" (p. 101), on which a discussion followed.

Dr. TRUBY KING said he was sure they were all very much interested in the cases which Dr. Fell had brought before them. There was one remark he would like to make on the last case in connection with the endurance displayed. While he had no doubt that Dr. Fell was perfectly right with regard to the question of mental disturbance accelerating death in cases where people had to face death under appalling circumstances, he thought there was another factor which Dr. Fell seemed to take in another direction in regard to the individual case he was dealing with, and that was the fact of the man having been previously in an emaciated state. He (Dr. King) thought that fact would tell in the opposite direction and make the persistence of life longer after total obstruction had taken place, rather than the reverse. They had a somewhat analogous case in connection with the respiratory organs. The experiments made with mice showed that if a mouse were put in a bell jar it would die in a certain time. If, after half the period of time in which the mouse would die had expired, another mouse, which had not been in the bell jar, were placed in the same atmosphere, it would be found that it would only live perhaps half as long as the original mouse, so that even in such a short period of time as that a certain amount of acclimatisation seemed to have taken place.

Dr. MAKGILL said in reference to Dr. Fell's second case—a cure for septicæmia—he thought their nurses ought to be examined. He had had a case of severe rupture of the perineum, and although it was operated on with all antiseptic precautions, septicæmia set in, and seven months afterwards he discovered that the nurse who attended to the patient was suffering from erysipelas in the head, and no doubt that was the cause of the septicæmia setting in.

Dr. MASON said he would like to add his tribute of thanks to Dr. Fell. He thought the last case was a most remarkable example of fortitude, courage, and good temper under circumstances which would exhaust all those various qualities from most of them long

before the expiration of thirty-four days. He thought there was some measure of truth in what Dr. Truby King had said in regard to that case, without denying the justice of what Dr. Fell had said. It was illustrated in the case of a strong man being suddenly laid upon his back; he did not stand it nearly so well as a woman. Women went on month after month under conditions which most men would kick against very violently if they had to bear them for a week, and there was no doubt at all that in cases of accident the strong man in many instances not only gave more trouble, but the effect upon his organism was much greater than in the case of a person who had been, so to speak, playing a lower tune all along. With regard to the formalin, he had not had much acquaintance with the strength used—1 in 80. Some little time ago there was a story circulated as happening in several places that a distinguished bacteriologist spilled some soup over his hand, and immediately, without any *malice prepense*, dipped his hand in formalin, and according to the various reports, it was cured at once. He (Dr. Mason) happened to do the same thing, and as there was a bottle of formalin handy he applied it in the way that these various paragraphs explained, and he could only say he was sorry he did it.

The questions were asked whether the formalin was repeated, and, if not repeated, how long it was allowed to remain, and also how it was applied.

Dr. FELL, in reply, said he was very much obliged for the comments that had been made on his brief notes. With regard to what Dr. Truby King and others had said about the previous emaciation and exhaustion having helped the man to endure his long privation instead of acting in the opposite way, he agreed there was very likely something in that, but he would like to advance as against that theory the fact that two or three men—Tanner and others—who had fasted for exhibition, and whose cases were thoroughly authentic, went from a full diet straight to their fast. He had had a long talk with a man who started to fast in Wellington—he did not keep it up because the doctors would not patronise him—and this man had told him that he began straight away from an ordinary diet, and suffered no inconvenience whatever from it. His chief trouble was beginning to feed again; he had to do that with extreme care. With regard to the use of the formalin, he believed that it acted very differently on different tissues and different persons in the same way that it was known certain antiseptics would burn some people's hands and not others. If he used the formalin again he did not think he would use it quite so strong, for it had produced a slight slough in the mucous membrane of the vagina, although not enough to cause trouble. The method adopted of applying it was purely an experimental one of dipping some strips of lint in the solution and plugging the vagina with it. He did not put it into the uterus.

Dr. TRUBY KING delivered an address on "The Prevention of Tuberculosis, more especially Bovine Tuberculosis." In his opening remarks Dr. King apologised for speaking on a subject which was rather hackneyed, but said his excuse must be that the disease was one which killed more numerically of humanity and the lower animals than any other disease. In spite of the fact that a great deal had been written on the subject, it seemed to him that the positive aspect of the matter, or rather the matter of health, had not received as much attention as it ought to have done, while an excess of attention had been paid to the negative matter of the extent of the disease. He might say at the outset that he did not intend

to suggest in any way a specific cure for tuberculosis. He supposed it might be said that tuberculosis in animals—in cattle especially—was amenable to direct medicinal treatment practically by the same means and to about the same extent as tuberculosis in man, and he thought the members would all agree with him that that was merely another way of saying that so far the direct medicinal treatment of bovine tuberculosis had been a very unsatisfactory matter. One authority told them he had used creosote in the same way as it was used for human beings, and one would certainly consider, if his statistics were to be accepted, that the results were highly satisfactory, for he had found that of the cattle he injected with creosote more than half tested at a period of some eighteen months or two years later showed no signs of tuberculosis; but, on the other hand, he candidly mentioned that he had found the same result with no injection of creosote, but at the same time he considered that the results appeared to be better with creosote than without it. He (Dr. King) thought that was about all that could be said with regard to the treatment of human beings by creosote. There was, then, no specific, so far as they were aware, for tuberculosis, and he thought they might safely say at the present moment that, so far as the lower animals were concerned, and so far as man was concerned in relation to those animals, that it would actually be an unfortunate thing if a specific should be discovered, for it was a fact that the enormous prevalence of tuberculosis among cattle—a prevalence varying from 5 to 50 per cent., and he knew an instance of a herd, thought good, which contained far more than 50 per cent. of tuberculous animals—that condition of affairs had brought about the same kind of healthy alarm which had arisen among men from time to time in connection with epidemics and plagues of cholera and so forth. Therefore, should they be able to find a specific for tuberculosis at the present time, he considered it would actually be an unfortunate thing, for while getting rid of one immediate scourge, they would not get that benefit they were likely to get from the efforts made to induce farmers to take a more rational view with regard to the treatment of their stock. If those present would excuse him for a moment, he would go into a very elementary matter. He merely wished to notice this to make easier the trend of thought he wished to bring before them. It seemed to him what was really most essential was a clear understanding on the part of the public of the various laws and conditions which were necessary for the preservation of life and health, not merely in man and in the lower animals, but in the whole organic world. If they took the case of plants, what did they find to be necessary in common with the animal world? He supposed he might say that all their requirements were, practically, a proper supply of air, water, food, a certain amount of sunlight, warmth, protection from the elements, and rest; those were about all their requirements. Now, if they went into a field where an agricultural crop was growing—for instance, a turnip field—they might find that the crop was vigorous, green, and perfectly healthy; while they might go into an adjacent field and find a totally different state of affairs, and, on investigating the matter, they would find that one of those factors which he had mentioned was wanting. They might find, for instance, that there had been insufficient rain, or an insufficient supply of food (by food he meant the minerals which were used for plants). They remedied those things, and found the plants quickly assumed the condition of health, unless they had passed beyond

the stage at which the remedies could take effect. [Dr. King then showed a diagram, illustrating the fact that different crops required different foods.] He said it seemed to him a very extraordinary fact that while children in country schools were taught an enormous amount of useless information, an enormous number of names in geography and so forth, they were practically taught nothing whatever of the laws of the universe. They were taught nothing as to those conditions on which human beings, in common with plants and animals, held their tenure of life, and this was the more extraordinary, considering they were extremely simple and definite and operated through the whole life of the individual. He had bought a book of geography that day used by the children in the Primary Schools, and had taken the trouble to ask one of the members present where several places were, but could get no information from him, and he had no doubt at all that nine out of ten of those present would be plucked on a page of that geography. What was the secondary effect of this condition of lowered vitality? Taking the case of the turnip field, it was found that the crop which was unhealthy was attacked by blight, while the other remained unaffected. It was not exactly what might be expected. One might almost expect to find in the case of plants that the more succulent would be selected, but as a matter of fact it was not so. It appeared to be more or less a question of vitality—there was always a tendency to attack the weak. Passing to the consideration of the lower animal world, what adequate requirements were there in addition to those in the case of plants? Practically speaking, one might say that the additional requirements were those brought about by the necessity for the maintenance of animal heat, and by the fact of locomotion. Thus, one might summarise the requirements of animals in this way—good air, good water, good food, a certain amount of sunlight, warmth, exercise, rest, and a certain amount of protection and cleanliness. He would not go into the question of the whole animal kingdom, but would restrict himself to the consideration of one particular animal, namely, the dairy cow. He thought it desirable to bring this before them, because they were not all living on farms, and, moreover, had neither the time nor the inclination to go into the figures with regard to the matter. Personally, he had been very much struck by the slight inquiry he had made into the subject. In Nature a cow usually bore a single calf, and naturally the calf was suckled and took its food from time to time. After a certain period, when it began to take grass, it no longer needed to be suckled, and the drain on the mother ceased. Occasionally a cow would give birth to two calves, and she had provision for the two. Let them consider what was done with the domesticated cow. She usually bore one calf also, but she did not rear her calf; it was taken from her, and she was milked twice a day in a very different way from that in which the calf milked her. The man who milked was supposed to press the udder and bring out every particle of milk in it, and that enormously stimulated the milk flow. It might, therefore, be assumed that he took all that the two calves would take. Then, further, during a very long period of time, by a process of selection, those cows which yielded the largest amount of milk had been selected as dairy cows. The cow started its life as a mother, when it was not more than half developed. As a rule, he might say that a cow bore a calf at about the age of two years, and its treatment was not generous even up to the time of bearing the calf. Let them consider for a moment what they had arrived at in the matter of the civilised cow. In an

excessively good milking herd, such as that of the Duke of Westminster, the cows averaged, he believed, about 7,000 lbs. of pure milk per year, and in every set of dairy cows there were a certain number which came pretty well up to that standard. On taking out the figures, it would be found that the solid organic matter produced in a year was something over 900 lbs. weight, and considering that about three parts of the weight of an animal was water, it would be seen that the animal was actually producing from three to four times its own substance in the course of the year, and giving it off to man. They must be under no misapprehension as to what that meant; it did not mean a mere transubstantiation of food from one condition to another—from sugar to starch, or anything of that kind—for it was known that in the animal economy the secretion of a thing like milk meant a real giving off; it came from the actual cells themselves, and must have been a part of the animal. He thought these were sufficiently startling facts; but they must remember in addition that the cow gave birth to a calf, but this event was, he believed, a comparatively insignificant matter in the life of a cow. There was every indication of that; a cow bearing and producing a calf fattened well, and did not seem to feel the strain. Putting it into comparison with the production of milk, it was found on working out the figures that a cow in good milking condition produced something equivalent in organic matter to two calves per week during its milking period. Referring to the economic aspect of the matter, he pointed out that when people found out that half their cattle were diseased and would have to be destroyed, they saw ruin staring them in the face. Then something was done, and he was glad to see that a Department had been organised such as there was, and was also glad to find the veterinary profession meeting them side by side in a meeting of that kind, for he thought that nothing but good could come from a mutual discussion of problems which concerned man equally with the animals. In connection with the economic aspect of the matter, he said he did not know the exact figures, but supposed it would be roughly within the truth, taking the average of the cattle throughout the country, to say that under existing conditions a cow produced about £6 worth of milk a year, or an excessively good cow £9 worth. Looking at it from the economic point of view, and considering that a cow would keep in milk for a period of about ten years, it would be seen that a very large question was involved in the fact of whether an animal produced a large amount of milk, or was poor at best, and very likely going to die of tuberculosis before its milking period was ended. One would expect that common sense on the part of the farming community would induce them to realise that an animal for such a purpose, which was so specialised, should certainly be well treated; but, as a matter of fact, in the majority of cases nothing of the kind was the case. As he had said in regard to the maturity of the cow, it was bred from at a much earlier age than it should be. Then, in reference to the various factors of health—he did not intend to analyse them one by one—but taking the air supply, it was not what it should be; there was no proper provisions for ventilation at all. Then, as to water, there was comparatively little convenience; the drinking water was often polluted. The food supply was extremely fitful, and in most cases the farms were overstocked, and there was no standby, as a rule, against the winter, and the animal had to stand a great stress, probably producing a calf as well as being milked. He wished it to be understood that from the time a cow bore a calf she was never doing

anything but producing milk or a calf, or both; there was no resting period. The cow was put to the bull a month or so after the period at which she had borne a calf. At that time she was in full milk, and that went on until two or three months before the calf was actually born; there was no resting period whatsoever. Turning to the consideration of how the calf was reared, he said that seemed to be one of the most important problems in the whole matter. In Nature, as he had said, the calf was supplied with milk by the mother. That would be the ideal method, and it was sometimes pursued, but of course it was extremely expensive, for the fat of milk was worth from 9d. to 1s. per lb.; recognising that they took away that fat and made it into butter. They might use linseed oil as a substitute, an oil which was worth about 2d. per lb., but the farmer did not look at it in that way; or they might use linseed itself, which contained a very large amount of oil, but the farmer chose a cheap substitute, and took oil cake and gave that in association with skimmed milk, and then was surprised that the calf did not thrive. As medical men, they knew the result of artificial food for infants; they knew that in the infirmary hospitals in France 50 to 75 per cent. of the children were found to die in a year, and yet they knew that under the careful dietaries they had drawn up for infants, infant feeding by artificial means was a perfectly safe thing. The feeding of calves appeared to him to be in the phase he had mentioned in regard to the feeding of infants—that was in an extremely primitive state. The calf was removed from its mother directly it was born, or very soon after. For the first week it probably got its mother's milk, because that was of no value to man. Then in the ordinary farms it would get nothing but skimmed milk, or skimmed milk with linseed. There was no recognised quantity; everything was done in the most slipshod way, and when one sought for information, one found the most vague reports, and with these conflicting views the farmers became hopeless, and gave up the question and did not rear calves, but bought at auction calves reared as indifferently as they would have reared them themselves. The calf being reared by these methods naturally sucked the ears, &c., of its fellows, to the benefit neither of the calf itself nor of its neighbour. As a rule, the calves were fed at very long intervals, probably only twice a day, and very often the milk was not warmed, and in that way the calves were badly treated. After a period of three or four months, in most cases the milk was withdrawn altogether, and the farmer was surprised to find that the calf did not thrive. Probably it died, otherwise it came to a kind of adolescence; winter came on, and it was turned out into a pasture where there was very little food, and at a very early date it became a mother. They could hardly expect to keep away tuberculosis so long as that state of things existed. The question seemed to him to be very much a question of instructing the farming community, and he thought the whole community ought to be instructed in the laws of organic life. [Dr. King then illustrated by diagrams the result of an experiment he had made in the feeding of calves.] He then quoted from papers by Professor John Scott and Dr. Downes in reference to the beneficial effects of sunlight in farm buildings. In continuing, he again referred to the want of knowledge on the part of the farmers; for instance, if he drew a farmer's attention to a calf, and said that it was looking bad, the farmer turned to him and said, "Oh, it is putting on bone, sir." Then, when they came to the question of early maturity, the farmers said they wanted to develop the

milking habit, as if they could develop the milk gland by itself. Their ignorance, to his mind, was absolutely appalling, and he thought it would be of great advantage if children in the Primary Schools could be taught something about the laws of organic life. He pointed out that at the show-yards the prize cattle were often tuberculous, and enumerated several of the points for which prizes were given, and said that the animals were in many instances made by artificial means to conform to a shape which had been laid down by man and not by the Creator, and quoted from the New Zealand Herd-book to prove the truth of what he said. Summing up, he said he had prominently mentioned, as factors in causing tuberculosis, the question of how the calves were reared, the question of the time at which the animals were allowed to become mothers, and so forth. He considered these were questions of great importance. There was one apparent anomaly in regard to the question of tuberculosis, and that was that animals in a wild state were not free from it. For instance, the Health Officer in Queensland had reported that the cattle there were comparatively subject to tuberculosis, although they had never been housed; but in that case he would point out that the cattle were taken to a hot climate and placed under conditions they were not accustomed to. He thought they had to consider all the conditions that were necessary for health, if they wished their cattle to be healthy. In conclusion, he thanked the members for the patient hearing they had given him.

Mr. GILBERT said he had listened with great interest to Dr. Truby King's remarks. With regard to the question of feeding, he thought there was no doubt that it was the cause, directly or indirectly, of most of the disease in the colony, with the exception, perhaps, of tuberculosis. It was found that from the north of Auckland to Stewart's Island a large number of the young stock died simply because they were improperly fed, causing a loss of thousands of pounds to the colony. As to whether it was the chief cause of tuberculosis, as Dr. Truby King wished them to believe, he felt perfectly sure it was not. Reasoning from the fact that the law of vitality applied, there was no doubt that many diseases of the plant attacked those plants which were puny and weak in preference to the others, but it could not be said, in reference to tuberculosis in the human subject, that it attacked the weak rather than the strong. It was impossible to get complete statistics of human beings, for they were not tested with the tuberculin test as animals were. He had seen large herds of cattle which had been well looked after in every way; they were never fed on skimmed milk, or even on the milk drawn from the cow; they resided with the mother six or eight months, and then were puny and weak; they were never housed, or rather only for two or three weeks for convenience in handling, and then in weatherboard sheds with plenty of ventilation; and yet, when he tested them, he found from 35 to 60 per cent. were tuberculous. One instance occurred to his memory of a herd of bull calves, in very good condition, which he examined eighteen months ago, and out of thirty-two were affected with the disease. The remainder were placed in a paddock, and, to his knowledge, were not in contact with any animal which had not resisted the tuberculin test. They were in good condition; in fact, they were prime fat. A year afterwards they were tested, and nine out of seventeen were affected. Where did they get the disease from? As to the question of curing the disease, he hardly agreed with Dr. Truby King that it would be an unfortunate thing to find a specific, because the present discovery of the prevalence of the disease was

going to make people do something better. He could only say, let that be soon. The statistics with regard to the disease spreading did not seem to support that view. Nevertheless, he quite agreed with Dr. Truby King in deprecating the method of dealing with stock in the colony. It was bad in every point, and they could never hope to have good cattle until they looked after the young stock and also the old. He also agreed with Dr. Truby King that milking completely lowered the vitality of the cattle. With regard to early maturity, he did not know about wild cattle, but he supposed they came to early maturity. Bad water seemingly had something to do with the disease, and he believed swampy and low-lying districts were more prone to tuberculous animals than other districts. When he came to New Zealand he was under the impression that the stock would not be tuberculous, for it was stated by eminent authorities that cattle living in the open were not so. He did not know of animals living under more natural conditions than in Queensland and New Zealand, and yet they were tuberculous. As to the question of killing the tubercle bacilli by air and sunlight, they found cattle attacked with the disease where there was plenty of air and sunlight, and where they were not housed at all. In conclusion, he congratulated Dr. Truby King on his admirable address.

Dr. DAWSON said he had simply to thank Dr. King for his remarks. Although, perhaps, the feeding and breeding of cattle was only indirectly a matter of interest to them as medical men, it seemed to him that a great many of the principles laid down were equally applicable to the rearing of infants—a matter which was most grossly neglected in many cases; and although it was possible to feed them satisfactorily by artificial food, any medical practitioner knew that it was very rarely done; artificial feeding had been carried out in a very crude manner and with the most disastrous results. He thought if young people were taught the values of foods generally it certainly would be supplying a much-felt want.

Dr. KING, in reply, said he had to thank those gentlemen who had been kind enough to criticise his remarks, and especially Mr. Gilruth, for what he had said on the matter, for he quite recognised his very extended experience in this direction. Mr. Gilruth had taken him almost too seriously in the matter of finding a specific for tuberculosis, but still he thought that it would be a better thing that tuberculosis should continue a little longer, and that farmers should be brought to an understanding of the absolute crudity of the methods by which they treated their stock, rather than that it should be stamped out at once. Nevertheless, he would be one of the first to stamp it out if he could. With regard to the question of feeding—narrowing it down to that. He wished them to clearly understand that feeding was only one item which he more especially illustrated as being experimented on by himself. The cow could choose for herself to a certain extent, but the poor unfortunate calf had nothing but what it was given, and was like a babe in that respect. He considered that the treatment of the calf was at the bottom of everything, and he was borne out in that opinion by practical farmers, and by one of the best breeders in the colony, whose cattle were free from disease. He did not mean to say they always would be. He knew the difficulty of accounting for tuberculosis in a large number of cases, but he thought that from their general knowledge of disease they might safely accept the fact that if they kept themselves and their patients in a high condition of natural vitality they were doing the best they could to keep them from disease and bring them back into a condition of health,

and he did not think tuberculosis was peculiar in that respect. He thought it would be found in those anomalous cases in which a considerable number of animals were tuberculous that the heridity of the stock was bad, or that there was some other factor which had not been found out. The whole thing he wished to contend was that if due attention were paid to the conditions which were necessary for the preservation of life and health in the animal world and in the whole organic world, tuberculosis would be enormously diminished and made unimportant, and that, secondly, a large number of other diseases would also be diminished, and the cattle would be much more directly profitable than they were under the present system.

Dr. WILSON contributed a paper on "A Case of Pylorotomy," which was taken as read.

FOURTH DAY, JANUARY 6TH.

At 2.30 p.m. on Friday, January 6th, Dr. King, of Auckland, showed a case of enlarged foot. It was generally considered to be a Madura foot, though some of the members thought it had an appearance of elephantiasis.

Three papers were read on "Typhoid Fever at the Auckland Hospital"—(a) Statistical side, by Dr. Baldwin; (b) Pathological side (Widal's Test), by Dr. Makgill; (c) Clinical side, by Dr. Fabst—on which a discussion followed.

Dr. MASON said he thought the charts which Dr. Baldwin had drawn up were very convincing, and some morals might be drawn from at least one of them. He noticed that the number of admissions to the hospital had increased very rapidly from 1887 to 1898, and especially in the last two years. It had occurred to him that under the circumstances, considering the number of admissions was still increasing, it would be wise to vaccinate for typhoid. Speaking on the pathological aspect of the question, he thought Auckland was to be congratulated on having so energetic a pathologist. A pathologist did not always meet with a great deal of public approbation, and he thought the medical men in Auckland ought to do everything they could to remove the thorns out of the path of a man who is not playing a popular tune. While agreeing with almost everything that Dr. Makgill had said with regard to the Widal Test, he would certainly prefer the use of dead bacilli. It was much simpler, and there was no possibility of spreading contagion; one could get a reaction, and did not require a microscope at all.

Dr. FELL asked Dr. Baldwin whether it was his opinion that the typhoid mortality after the age of forty years became enormously increased.

In answer to Dr. Fell, Dr. BALDWIN said he had calculated the death-rate for a period of three years, and found that from the age of forty years and upwards the death-rate was 32 per cent. Up to that the greatest mortality was between the ages of twenty-five and forty years, when it was 25 per cent., so that there was really a considerable increase; but as against that the number of cases was rather small—only amounting to ninety-eight altogether—so that the number was perhaps hardly large enough to go on.

Dr. MAKGILL thanked the members for the attention given to his paper. There was one detail in Dr. Baldwin's statistics which interested him very much, and that was that of the cases whose histories he could trace fourteen per cent. were visitors from districts not exposed to typhoid infection. That seemed to him a very high proportion indeed, and it bore out the theory that visitors to a typhoid district were more liable to infection, and it rather suggested the idea that the

people who were living in typhoid districts and drinking the water consumed a certain number of attenuated bacilli, and in time were to some extent immunised by those doses. He would like to compliment Dr. Baldwin on his charts, for he knew that an enormous amount of labour was involved in their preparation. With regard to the dead bacilli, he would certainly try that method the first time he had an opportunity.

Dr. SCOTT contributed a paper on "Two Cases of Atresia of Vagina," which was taken as read.

A communication was received from the National Council of Women of New Zealand enclosing a petition, divided into six sections, and correspondence between their Council and Dr. McGregor in reference thereto.

On the motion of Dr. Fell, seconded by Dr. F. M. Purchas, it was resolved: That the first four sections be agreed to; that the fifth section they could not agree with, and that they were divided in opinion on the sixth section.

At 8:30 p.m. Dr. F. M. Purchas exhibited two cases, one case of severe hysterical spasms, and another of specific necrosis of the palate processes and other portions of the maxillary bones.

Dr. TRUBY KING gave a lantern demonstration of the cerebral changes in general paralysis of the insane.

Votes of thanks were passed to the President, the retiring President, the Secretary, the delegates and visitors, and to the University Council for the use of the room.

The meeting then terminated.

BALLARAT DISTRICT BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary quarterly meeting was held at Ballarat on January 26, 1899, at 8.30 p.m. Present: The President (Dr. R. Scott), Drs. Champion, Cussen, Guthrie, Hardy, Martin, McGowan, Morrison, Pinnock, Richards, Usher, and Mitchell (hon. secretary), and Mr. Treloar.

Apologies were received from Drs. Adam, Gardiner, R. W. Lethbridge, Palmer, Smith, and Wilson.

Accounts amounting to £17 7s. were passed for payment.

Drs. Richards and Guthrie were appointed scrutineers, and they declared the ballots unanimous in favour of the following gentlemen, who were elected members of the Branch:—Arthur Gerald McGowan, M.B., Ch.B., Ballarat, proposed by Dr. Gardiner, seconded by Dr. Cussen; Francis Hudson Eastwood, M.B., Ch.B., Ballarat, proposed by Dr. Mitchell, seconded by Dr. Salmon; W. Chisholm Ross, M.B., Ch.B., Dimboola, proposed by Dr. R. Scott, seconded by Dr. Champion; Charles Frederick Lethbridge, M.R.C.S., L.S.A., Beaufort, proposed by Dr. Richards, seconded by Dr. R. Scott; Alf. C. W. Yelland, M.B., Ch.B., Creswick, proposed by Dr. Gardiner, seconded by Dr. Wilson; Albert Edward Martin, M.D., F.R.C.S., Ballarat, proposed by Dr. Mitchell, seconded by Dr. Guthrie; Robert Wellesley Lethbridge, M.B., Ch.B., Ballarat, proposed by Dr. Pinnock, seconded by Dr. Mitchell; William Edward Young, L.R.C.P., L.R.C.S., Ballarat, proposed by Dr. Salmon, seconded by Dr. Mitchell.

Dr. PINNOCK then read a paper on "Some Cases of Rarity met with in General Practice" (reported at page 91). This resulted in an animated discussion, in which Drs. MORRISON, MARTIN, and USHER took part.

Dr. Palmer's paper on "A Case of Ruptured Ligamentum Patellæ" (reported at page 103) was, in his absence, read by the HON. SECRETARY. In the discussion which followed several members considered that the evidence laid before them scarcely justified the diagnosis of so rare an injury, and regret was expressed that Dr. Palmer was not present to throw further light upon the case.

Dr. USHER then read notes on "A Case of Uterine Hydrorrhoea," which presented some curious and not easily explained symptoms, and was of considerable interest. In the discussion Drs. Cussen, Martin and Pinnock quoted cases in their own practice in which there had been large discharges of clear fluid from the uterus for several days either before or after labour or miscarriage.

THE PRESIDENT reported that eleven members had spent a most pleasant day at Ararat on November 9, 1898, on the invitation of Drs. Adam and Beattie Smith. These gentlemen were accorded the heartiest thanks of the Branch for their kind and generous hospitality.

A resolution was passed expressing regret at the loss sustained by the profession in the death of Dr. Miller, of Yackandandah.

The President was authorised to interview the editors of the Ballarat daily papers and endeavour to induce them to omit the names of doctors in letters of thanks from grateful patients.

It was resolved that subscription to Dr. Burke's Memorial Fund be left to individual members.

It was resolved to inform the Ballarat Druggists' Association that the medical men of Ballarat would continue to prescribe according to the British Pharmacopoeia of 1885 until April 30th next, unless otherwise specially marked. After that date they will prescribe according to the Pharmacopoeia of 1898.

The resignation of Dr. W. Beattie Smith as a member of the Council was left in abeyance for the present.

The proposed by-laws of the Branch were considered *seriatim*; a few minor alterations were made, and they were then adopted as amended. Printed copies were ordered to be supplied to every member of the Branch.

Dr. MCGOWAN exhibited the following specimens:—

Specimen 1.—Kidneys from a case of general tuberculosis (boy, *æt.* 13). Both kidneys cystic and full of tubercular caseous material; no kidney structure visible to naked eye. Process started as tubercular ostitis of os calcis. One day patient had retention, and on a surgeon passing catheter a "click" was noticed, and suspecting impacted calculus the patient was sent to hospital. He died uræmic a few hours after admission. Every organ in the body was affected with tuberculosis.

Specimen 2.—Heart from a case of acute disseminated miliary tuberculosis. Process started as a caseous bronchial gland. There was an acute dissemination of tubercles through both lungs. The pericardium was thickly studded with miliary tubercles and also large caseous patches of much older date. As is often noted in these cases symptoms were well marked, but physical signs were most indefinite.

Specimen 3.—Bladder showing hernial protrusions of the mucus membrane through atrophic patches of the muscular wall. Large prostate and much hypertrophy of walls.

Specimen 4.—Multiple renal calculi of various shapes. No symptoms during life.

Specimen 5.—Small ovarian cyst.

Specimen 6.—Uterus showing multiple subperitoneal myomata.

PROCEEDINGS OF OTHER SOCIETIES.

MEDICAL SOCIETY OF QUEENSLAND.

THE 145th general meeting was held on February 7th, 1899, in the Society's rooms. Present: Dr. Hardie (President), Drs. Wheeler, Gibson, Hill, Carvosso, Scott, Bancroft, Orr, and Turner.

The balance-sheet was read and adopted.

Dr. BANCROFT related a case of attacks of giddiness with nystagmus, vomiting, and other symptoms in a patient suffering from loss of hearing and noises in one ear.

Dr. GIBSON had seen the case some years ago, and had regarded it as one of primary middle ear trouble, secondarily involving the labyrinth. At that time the patient had not developed vertiginous attacks.

Dr. TURNER read a paper on "A Case of Puerperal Eclampsia with Hæmaturia." (See page 94.)

The 146th general meeting was held on March 7th, 1899, in the Society's rooms. Present: Dr. Hardie (President), Drs. Cameron, Francis, Taylor, Scott, Orr, Gibson, Hopkins, Carvosso, and Turner.

Dr. James Hogg, of Goodna, was unanimously elected a member of the Society.

Dr. GIBSON showed two eye cases.

1. Double coloboma, including choroid and disc, with nystagmus, converging strabismus and $3\frac{1}{2}$ d. hypermetropia.

2. Peculiar cataract in a child, probably traumatic, but without a history.

Dr. TURNER showed four cases of lead-poisoning, and remarked that two of the cases originated in New South Wales in an agricultural and dairy-farming district. It was already known that the affection was widespread in Queensland. Lately cases had been observed from Maryborough, Ipswich, and Toowoomba.

1. John McD., aged 10 years. Was in Kiama Hospital twelve months ago with weakness of legs and wrist-drop; this was his second attack; came to Brisbane last May with well-marked paralysis. Present condition: Complete paralytic foot-drop; paresis of extensors of fingers; faint traces of blue line opposite first lower molars.

2. Ruby, aged 8 years, sister to John. Had an attack similar to her brother's two years ago; treated in Sydney and recovered completely; was quite well on coming to Brisbane last May; present attack of one month's duration; pains in arms and legs; vomiting; complete wrist and foot-drop; distinct traces of blue line opposite lateral incisors.

3. Dorothy F., aged 5 years. Ill three months; pains in abdomen and legs; headaches; paresis of extensors of fingers; paresis and wasting of short thumb muscles; paralysis of flexors of foot; distinct blue line opposite upper central incisors, traces elsewhere.

4. Ruby W., aged 4 years. Ill four months; vomiting; abdominal pains; pains in arms and legs; headache. The effort to walk is evidently painful, so that foot-drop cannot be made out with certainty; no blue line.

Dr. TAYLOR remarked on the difficulty met with in testing for lead on account of the presence of traces of this metal in the reagents used. There were other causes of peripheral neuritis, and cases of anterior poliomyelitis might present similar symptoms. There

appeared to be great difficulty in ascertaining the source of the poison, and it seemed strange that observers in other colonies were unacquainted with these cases, although the conditions were there much the same as in Queensland. The whole problem was surrounded with difficulty. Undoubtedly some of the cases were due to lead, but with regard to many the evidence was inconclusive. Of twenty-two samples of urine the analyst had found traces of lead in five, and the possible presence of bismuth in the urine might have led to error. Of forty samples of water traces of lead were found in three only, though large quantities of zinc were present. The late Commission approached the subject with an unbiassed mind, but difficulty in finding a cause had thrown doubt on the nature of some of the cases. Lead ought to be always present in the urine, and the source from which it came should not be difficult to discover.

Dr. ORR said as far as his knowledge went bismuth gave different reactions to lead.

Dr. HOPKINS believed that white paint on fences, &c., was a possible cause. He had observed children's hands coated with this.

Dr. GIBSON said these cases formed a group, all exhibiting much the same symptoms, which are recognised all over the world as due to lead, and there was no other poison to which all those symptoms were attributable. If lead was found in the urine of one case of the group, it was not necessary to find it in all. It was fair to assume that it would be found in the others if sought for at the proper time, and frequently enough. Lead might be found only once in a dozen samples of urine from the same case. If the cases were not due to lead they must be due to some cause not yet recognised in medical literature.

Dr. TURNER said the source of the poison was for the chemist to discover. He was certain that the whole group of cases were due to the same cause, though of course all cases could not be recognised with equal certainty. Yet it was most important, practically, to be able to recognise cases in an early stage, like the fourth case exhibited. It was not necessary to find lead in the urine of every case. He was glad to hear it admitted that some of the cases were undoubtedly due to lead, as the important point he wished to establish was the existence of an epidemic of lead-poisoning. In all epidemics there were some doubtful cases.

The discussion on the prevention of tuberculosis was postponed till next meeting.

NEW SOUTH WALES MEDICAL UNION.

THE Sixth Annual Meeting of the members of the New South Wales Medical Union will take place on Wednesday, March 29th, at the Editor's Library, 121 Bathurst-street, Sydney. The business includes the election of office-bearers for the ensuing year, the consideration of the annual report and Treasurer's statement for 1898-99, and any other business which may be brought forward.

Members are reminded that their annual subscription (£1 ls.) for 1899-1900 fell due on March 1st, and must be paid before April 1st to the Treasurer, Dr. W. H. Crago, 16 College-street, Sydney, otherwise they are liable to have their names removed from the list of members. The Medical Union is the most flourishing medical society in Australia, and contains nearly 300 members, its reserve fund amounting to over £1,000.

LETTERS TO THE EDITOR.

FILARIAL METAMORPHOSIS IN THE MOSQUITO.

(To the Editor of the Australasian Medical Gazette.)

SIR,—In the issue for June 20th, 1898, there appeared a letter from me asking for information on the above subject. I was anxious to learn whether anyone had written upon Filarial Metamorphosis since Manson's book appeared.*

No one replied to my enquiry except Dr. Patrick Manson, who directed me to a later work of his published in the Transactions of the Linnean Society of London.† This bears the date March 6th, 1884, whereas the book was written in June, 1883.

Dr. Manson wrote that nothing had been done since his paper in the Linnean Society's Transactions, and he encouraged me to investigate the subject. Recently I have made some observations on the life-history of the "House Mosquito," *Culex ciliaris*, Linn., described by the late Fred. A. A. Skuse.‡

This mosquito, which, it is thought, had been introduced into Australia from Europe, is thoroughly domesticated, and can be bred and kept in confinement in suitable vessels with the greatest ease.

Tradition says: "A mosquito lives a day or two; that it feeds but once, afterwards retiring to some quiet spot where the ova are matured, the eggs laid in water, after which it dies; that the male mosquito does not feed, etc."

Dr. Manson thought that it rarely occurred for them to live seven days after their meal of blood. My own investigation into Filarial Metamorphosis last year tallied exactly with Manson's in respect to mosquitoes, and also in respect to the metamorphosis, except in one important item. I had never seen the actively moving filaria, the last stage of the metamorphosis; this, according to Manson, was to be seen occasionally in mosquitoes that died on the sixth or seventh day. It never occurred to us that our mosquitoes wanted to be fed, consequently they died of starvation about the sixth day, and before the filariae had developed sufficiently.

In confinement it is necessary to feed mosquitoes. Various methods and foods were tried, with very little success, until ripe bananas were given, which proved to be a most suitable food; it was noticed that both male and female mosquitoes sucked the juice of the banana almost every day. It was also found that mosquitoes would live in glass vessels up to two months; the life of a mosquito is, therefore, not one or two days, but a month at least, and frequently two months. Lately I have been able to resume the investigation into Filarial Metamorphosis, thanks to the Queensland Branch of the British Medical Association, and have seen the actively moving metamorphosed filariae in the thorax of mosquitoes, but not before the sixteenth or seventeenth day; they are to be seen in every mosquito which has imbibed filariated blood seventeen days previously. Dr. Manson saw them in mosquitoes that died six or seven days after their last feed of blood, but those particular mosquitoes had, I believe, fed on filariated blood ten days, at any rate, before they came into his possession.

The embryo filaria, when it is taken into the mosquitoes' stomach, measures $\frac{1}{10}$ " in length by $\frac{1}{100}$ " in breadth; on the seventeenth day it measures $\frac{1}{15}$ " by $\frac{1}{100}$ ", and it is not killed when put into water.

I believe now with Manson that water is the medium by which the young filariae are transferred to the human host. I should like to see the crucial test applied to set aside for all time the doubt as to whether the mosquito is or is not the agent by which Filariasis is transmitted from man to man. I suggest that this should be done in the following way:—Induce a life-sentenced prisoner to submit to swallow some of the advanced metamorphosed filariae on condition that he receive a free pardon. I fear, however, that without the influence of the whole medical profession it would be hard to persuade any of the Australian Governments to grant the free pardon. By grossly infecting the prisoner, his life might be endangered, but with the object of proving that the disease can be so transmitted only a few filariae need be given him, and these would cause very little, if any, inconvenience.—I am, sir, yours, etc.,

THOS. L. BANCROFT.

Burpengary, March 1st, 1899.

AUSTRALIA'S FINANCES.

(To the Editor of the Australasian Medical Gazette.)

SIR,—In consequence of a colony's great financial difficulties, a circular, which has emanated from some morbid brain, has been issued as below. I pity any poor nurse or medico who wishes to keep things clean; but there—further comment is needless. For the delectation of your readers I append copy:—

"I am directed by my Hon. Minister to request that you will inform your hospital staff that on and after 1st November (1898) no article of their wearing apparel will be washed or ironed in your hospital laundry or anywhere else at the Government expense."

This is issued in a colony where the police are better paid, and make by so-called allowances, greatest item known as "blood money," far more than any medico.

I am, yours, &c.,

EAGLE EYES.

IDENTIFICATION OF HERBS FROM AUSTRALIA.

(To the Editor of the Australasian Medical Gazette.)

SIR,—We recently received from Sydney a large packet of herbs which was put on board the "Thermopylae." No advice was received in reference to it, and it is not known from whom the parcel came. An attempt has been made to identify the plants, but it has not proved successful. It is probable that they were despatched to us for identification and investigation by a medical man or chemist who intended to write us at the same time, but failed to do so.

As we are anxious to get to the bottom of this matter, it has been suggested that perhaps you might be able to help us by inserting a short note in your journal requesting the sender to communicate with you or with us, and we think that the query would stand a better chance of being answered if it appeared in the literary instead of the advertisement columns of your paper.

We are, yours very respectfully,

BURROUGHS, WELLCOME & CO.

London, January 27th, 1899.

* The Filaria Sanguinis Hominis. H. K. Lewis, London.

† Vol. II., part 10, 2nd series Zoology.

‡ Proceedings of the Linnean Society of New South Wales, Vol. III. (series 2nd), p. 1748.

EXTRACTS FROM FOREIGN MEDICAL LITERATURE.

BY WALTER SPENCER, M.D., ENMORE, N.S.W.

Annales de la Société Belge de Chirurgie, December, 1898, describes an operation by Dr. Dépage for extensive *oesophageal*, which included resection of tongue, velum, tonsils and pharynx through the buccal cavity. The patient made a good recovery without having incurred the dilapidations of the transaxillary method or any enlargement of the buccal opening.

Archives Provinciales de Médecine, Paris, vol. I, No. 1 (January, 1899) relates a serious outbreak of *Psittacosis* in a family that purchased a sick parrot. The bird was occasionally let loose, caressed, and handled. Seven persons were attacked, four died, the parrot recovered. In some patients pulmonary, in others enteric, symptoms predominated. All manifested a typhoid state; the pneumonic forms had little if any expectoration.

The specific bacilli could not be isolated, but specimens of the blood agglutinated in presence of the bacillus of Nocard. In one case agglutination was obtained with the typhoid bacillus, a related type.

Les Nouveaux Remèdes, Paris, October, 1898, contains a survey of *Tannigen* and Tannalbin, much to the advantage of the former. Given in catchets, or mixed with food, it acts rapidly and specially in subacute diarrhoea upon focal matters which contain masses of mucus, blood, or pus. In chronic diarrhoea relapses occur, which demand its repetition. It does not cause the gastric fatigue which ensues upon the use of Tannin.

The dose for a child is one décigram, for an adult five décigrams, which should be reduced after a day or two to three or four. If not given mixed with food, it should be one hour before. A solution of HCl, in cases of gastric insufficiency, to prevent its double decomposition in the stomach, should be given also in affections of the large intestine, where the local effect is required.

(Tannigen is also belauded in *Gl' Incurabili* of November, 1898).

The same journal for November mentions Schwertschki's chemical combination of Menthol with Valerianic acid, which he calls *Validol*, an energetic stimulant which causes no local irritation. It is usually given with free Menthol, 30 per cent., ten or fifteen drops in sugar or wine. It excites appetite, dissipates nausea and gastric crises, is useful for painting inflamed tonsils, for inhalation in catarrh, and is an antiseptic application on the skin.

Annales de Médecine et Chirurgie Infantiles, Paris, December, 1898.—Dr. Larger expatiates on the value of cold saturated solution of Potass chlorat as lotion and compress for burns. Relief of pain is immediate.

Bulletin de l'Académie R. de Médecine de Belgique, December, 1898.—Dr. Dandois gives detailed consideration to the surgical treatment of obstinate severe *Neuralgias*, and to the cases of ablation of the ganglia which have been performed in the last resort. He now believes that section or resection of a nerve removes pain by reacting upon the central ganglion, and that the pain recurs when the reaction is exhausted; that pain may be thus relieved by operating either on the peripheral end of an affected nerve or on any part under that nerve's influence, or even in some cases on a part influenced by another nerve which connects with the same ganglion.

ABSTRACTS.

"TIPS" FOR PRACTITIONERS.

DR. WILLIAM MURRELL, of the Westminster Hospital, London (*Medical Brief*, January), in an article on the American physician in London, says that he endeavours to impress upon his students the importance of—

1. The value of small doses of tincture of aconite frequently repeated in the treatment of amygdalitis and in the initial stage of febrile diseases.
2. The value of painting the chest and back with *liquor iodi fortis*—diluted if necessary with an equal quantity of the tincture—in all cases attended with cough.
3. The value of a pill of exsiccated ferrous sulphate in conjunction with the administration of purgatives in the treatment of anemia.
4. The value of grain doses of gray powder with an equal quantity of Dover's powder from three to six times a day in the treatment of syphilis.
5. The value of large doses of the iodides in the treatment of tertiary syphilis.
6. The value of large doses of bromide of potassium in the treatment of the "heats and flushes" and other symptoms from which women suffer about the time of the menopause.
7. The value of large doses of quinine in the treatment of supraorbital neuralgia, and in the periodical febrile disturbances from which old malarial patients suffer.
8. The value of five grains of butyl-chloral-hydrate with one two-hundredth of a grain of gelsemin in neuralgia of the fifth nerve.
9. The value of small doses of a saturated solution of camphor in alcohol in the treatment of autumnal or choleraic diarrhoea.
10. The value of small doses of perchloride of mercury in the treatment of infantile diarrhoea when the stools are green, slimy, and offensive.
11. The value of sulphide of calcium in doses of a tenth of a grain in the treatment of boils, carbuncles, and abscesses.
12. The value of nitroglycerin and nitrite of amyl in the treatment of angina pectoris and allied conditions.
13. The value of alcohol in the treatment of fevers.
14. The value of flying blisters in typhoidal conditions.

THE LAW OF COMPENSATION.

Medical Snap Shots states in its issue for February that "a physician, in speaking of the business side of the practice of medicine, says: 'A doctor will trust people longer and more foolishly than any man on earth. He will go on trusting people for years, until they leave him on account of hating him because they have owed him so much and so long. Then they will go to another physician and pay him, with little or no hesitancy.'"

CLINICAL RESEARCH.—Dr. Litchfield is prepared to make examinations for medical men as follows:—1. Diphtheria bacilli. 2. Tubercle bacilli. 3. Widal's reaction. All information supplied by the above at 118 Glebe-road.

NOTICES.

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The Australasian Medical Gazette and the British Medical Journal are supplied to all Financial Members of the New South Wales, South Australian, and Victorian Branches Free of Cost.

Subscriptions (£2 2s. per annum) should be forwarded to the respective Branch Treasurers as below:—

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THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
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ADELAIDE, S.A.; AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH MARCH, 1899.

EDITORIALS.

CLERICAL HYSTERIA.

HYSTERIA consists of a group of symptoms, occurring mainly in females, and indicative of functional disturbance of the nervous system in general. It is characterised by evidences of mental perversion and by disorders, more or less marked in different cases, of all the functions of the body. Though the term "hysteria" implies the idea of a relationship with the

special organ of pro-creation in woman, it has also existed in the male subject, and this fact indicates that it is not necessarily dependent in all cases on the existence or state of the organ from which the term is derived.

Hysteria is remarkable among the neuroses for its frequency and generality of diffusion at all times and in all parts of the world. It is described in the very oldest Brahminical writings, and by the Greek and Arabian physicians, some of whom regarded it as being specially incident to women or those of women-like proclivities, and which frequently is accompanied by that feeling of a lump in the throat, known as the "globus hystericus." Others thought it due to the retention of bile, retrograde metamorphosis of tissues, or the effete products circulating in the blood caused by the inefficient evacuation of waste products produced within the body by the natural processes of nutrition and growth.

These and similar views prevailed until the beginning of the eighteenth century, when the idea was first propounded that hysteria, like epilepsy, was an affection of the brain. Sydenham considered hysteria to be the most frequent of all chronic diseases, and stated that, though most common in women, it was frequently seen in men, and that its origin must be sought in some affection of the nervous system. Later on Dr. Whytt asserted that hysteria was due to "a too great delicacy and sensibility of the nervous system."

It is remarkable that hysteria may attack individuals or communities—that is, it may be isolated or collective.

Thus we have not only to consider this malady as an isolated identity in itself, but also contemplate it as a whole series of phenomena, involving individuals, sects, and communities, and undergoing evolution during past and present ages; also as being the outcome of some oblique characteristic or characteristics involving the philosophy, physiology, and possibly pathology, of human nature, human mind, and human existence in this world.

In reviewing the history of nations we find that, like individuals, they have their hysterical whims and peculiarities, their seasons of excitement and recklessness, which may either become harmlessly exhausted or lead up to disastrous consequences. We find that whole communities become suddenly absorbed in one object, and, devoid of reason, with impetuosity follow in its pursuit. Millions of people become suddenly impressed with some very palpable delusion, pursue it to its death, or, having wearied of it, discard it for another more novel

or fascinating folly. We see one nation suddenly seized with a desire for military glory, another as suddenly become hysterical about a religious scruple, and neither of them regain their senses until overwhelmed with disaster, devastation, bloodshed and misery.

In an early age of Europe its population became demented about the sepulchre of our Lord; in another age it became insane from fear of the devil, and caused the sacrifice of thousands of lives to the delusion of witchcraft. Then, again, the many became idiotic concerning the philosopher's stone, which was to transmute all metals into gold, and in pursuit of this *ignis fatuus* committed the most extraordinary follies. The slow poisoning of an enemy was once considered a laudable undertaking. Those who would shudder and shrink from stabbing a man would drug him to death without scruple. Fair ladies of gentle birth caught the contagion of murder, and under their auspices it became popular and fashionable to poison.

Some hysterical delusions, though notoriously palpable to all the world, have subsisted for ages, and flourish as widely among civilised and polished nations as among the early barbarians with whom they originated—such as the belief in ghosts, goblins, haunted houses, omens, and the divination of the future, all of which seem to defy the progress of knowledge to eradicate them entirely from the popular mind. Other delusions or fashionable crazes need only be mentioned. The Mississippi scheme in France, and the South Sea Bubble in England, both occurring about the same period; the tulip mania, the magnetisers, the extraordinary proceedings of Mesmer, his followers, and his imitators; the various waves of religious revivals, the extraordinary æsthetic movement so happily extinguished by the witty satire of Gilbert and Sullivan in "Patience," finally concluding with the present period of Nihilists and Anarchists, with their insane and purposeless homicidal proceedings. All these hysterical vagaries of the human race, so varied in their character, and so paradoxical in their motives, form a study of surpassing interest, and collectively open up an intellectual pursuit worthy of a careful research, and possibly may give a key to individual crazes.

An acute form of what may be called clerical hysteria has become epidemic amongst some religious enthusiasts in Sydney on the occasion of His Excellency Governor Hampden, family, and suite electing to take their departure from Sydney one Sunday afternoon by special train.

We epitomise from the press some of the

comments upon this action by those whose actions and writings prove them to be temporary "clerical hystero-epileptics."

One organisation expresses its regret that Lord Hampden should select the afternoon of the Lord's Day for his official departure, and the person who proposed a resolution to that effect, in pathetic language, regretted that a public farewell on such an occasion would preclude the attendance of the heads of religious bodies from taking part in any such function on the "Lord's Day." A speaker suggested that there was a conspiracy at work in their midst to lessen the bonds which bound them to the sacredness of the Lord's Day.

Then again, a section of the religious community deemed it a solemn duty to dictate to His Excellency and family their regret at the time fixed for their departure, and suggesting a change in his plans "rather than offend the religious convictions of the most loyal of Her Majesty's subjects."

Again, a protest was aggressively passed by another section of the Christian community, "Regretting that Lord Hampden should have arranged his departure on the Lord's Day, thus flouting the sacred character of the day, and the deepest sentiments of the religious public."

Letters have also appeared in the press of similar import, all of a hysterical tendency. One clerical hysteric says, "With us Sunday is the 'Lord's Day'; we hold it sacred for the purposes of rest, worship, and Christian service. Our feeling, and that (we believe) of most 'religious denominations' about this proposal is one of indignant astonishment at the inexplicable insensibility of the Premier to the religious convictions of this Christian country," &c., &c.

It would be painful as well as needless to prolong the agony by a repetition of the pitiful effusions crowding into the public press, showing not only the mental perversion of the speakers and writers regarding the true nature of the so-called "Sabbath," but their hyperæmic intolerance, self-evident want of knowledge of the Christian religion, and gross incapacity to grasp that ideal known as Christian charity.

History repeats itself, and (John v.) we find the Jews were worked up to a high state of hysterical excitement over the action of Our Lord upon the occasion of His violating the Sabbath Day by first healing the impotent man at the pool of Bethesda and then bidding him to take up his bed and walk. The reply of the Son of God, who became Man, was characteristic and instructive: "My Father," says the Saviour, "worketh hitherto, and I work."

We have not time to enter fully into an analytical consideration regarding the observance of the Sabbath. We merely summarise a few rough outlines regarding that institution.

The Ten Commandments doubtless contain a certain rough statement of the moral law for all time; but as to the form or *letter*, there is that in them which is transitory, applicable to Jewish circumstances and past times, as well as that which is permanent and good for our times. In the Fourth Commandment a rule of rest is laid down most fit and effective for the training of a horde of freshly emancipated slaves.

"On the seventh day thou shalt rest, that thine ox and thine ass may rest, and the son of thy handmaid and the stranger may be refreshed." "That thy manservant and thy maidservant may rest as well as thou." (Exod., xxiii., 12; Deut., v., 14.) Thus have we a higher ideal in connection with the Sabbath, implying consideration for others, and the exercise of benevolent and charitable feelings towards them. The rest of the Sabbath, in short, was not merely a personal enjoyment to be passively received; it was to be an active entering into the mind of God, what had been bestowed on him, each Israelite was to distribute in the same spirit of love and thoughtful care as that in which he himself had been dealt with.

Notwithstanding the fact that violation of the Sabbath was punishable by death, yet we learn from different passages of Scripture (Hosea, ii., 11; Luke, xiv., 1) that Israel's Sabbath, though enforced with such a tremendous penalty, was not a day of austerity and gloom, but of hilarity and joyfulness; of all that joyfulness which neither secularises nor wearies as much as, often more, than work.

It is strange that, whilst the Christians have never been able to convert the Jews, the Jews have converted most of the Christians to the Sabbatical observance of the Lord's Day; but, in fact, the rules of the Sabbath have never been authoritatively transferred to the Lord's Day—not by Christ, who declared that even the rigid Sabbath was made for man, and therefore should not be used to hinder or mar his development; not by the Apostles, who told people that they might do as they pleased (Romans, xiv., 5-6), forbade a superstitious observance (Galatians, iv., 10-11), and declared the Sabbath abolished (Colossians, ii., 16); and not by the Bishops and the Fathers of the Church, who like St. Cyril, Bishop of Jerusalem, in the fourth century, forbade the observance of the Sabbath day; or St. Jerome, who,

in describing the Lord's Day, expressly mentioned that Christians were free to work after church hours if they pleased; not by the Church Councils, more than one of which contains strictures on the Sabbatical rule; not by Luther in Germany, whom the Sabbath rule seemed to intensely irritate, and who ordered his disciples to work, to ride, to feast, to do anything on Sunday, rather than "set the Lord's Day upon a Jewish foundation;" not by Calvin, who played bowls on Sunday; not even by old Simeon, who said, although he was strict himself, he did not wish to impose his rules on other people; and, lastly, not by any one who reads his Bible with common intelligence.

Therefore, the only conclusion to be arrived at regarding this Sabbatarian hyperæsthesia recently generated amongst certain sections of the religious community is that either we have just suffered from an epidemic of Clerical Hysteria—or we have been inflicted with a contagious form of narrow-minded bigotry—if the latter, we can only conclude by paraphrasing an observation once made by a celebrated authority on Mental Diseases:—"There is such a thing as a clerical snob. He it is who is quite certain that he has fathomed the depth of the great ocean of theological knowledge, and that he can gauge the Almighty's will with the measure which he carries in his waistcoat pocket."

THE MEDICAL BENEVOLENT FUND OF NEW SOUTH WALES.

THE Medical Benevolent Fund of New South Wales was instituted with the object of affording assistance to any duly qualified medical man, or widow, or orphan children of such, whom the committee should deem worthy of help.

The affairs of the Fund are managed by a committee of five medical men elected at the annual meeting of the subscribers. The Fund has now been in active operation for two years, and during that time it has been able to give assistance to deserving cases, both by supplying money to meet immediate necessities, and in other ways.

So far the work has been satisfactory, and, owing to careful investigation of each case claiming relief, the Fund has been applied in such a way as to give urgently needed help to unfortunate members of the profession and their families. But it must be pointed out that, though there is still a reserve fund, the claims, though not numerous, have largely absorbed the contributions for the past

year. In order to enable the Fund to be of such stability as to carry out its work effectively, an increase in the number of subscriptions is necessary. If every member of the profession in the colony would make a point of sending in the small annual subscription desired, the work would then rest on a firmer financial basis, and, instead of its present precarious footing, the fund ought to be in a position to meet such demands as are likely to occur.

Any member of the medical profession wishing to subscribe to this fund, or to obtain any further information upon the subject, is requested to communicate with the Honorary Secretary, Dr. F. W. Hall, 18 College-street, Sydney.

THE GOULBURN VALLEY (VIC.) LODGES EMBROGLIO.

THE Shepparton doctors are having trouble with the local lodges; the latter are uniting with the object of forcing the medical men to accept the terms dictated to them. Failing this, the next move will doubtless be attempting to induce outside practitioners to migrate to the sphere and enter into competition with their professional brethren already on the spot, who are merely contending for their just rights and striving to uphold the best interests of the profession, with which the welfare of the community is intimately associated.

We are requested to give publicity to this local battle of the clubs, and do so with pleasure, pointing out that the essential factors in the doctors course of action must be (1) that of presenting an uncompromising front at the beginning, (2) combining together to defeat the threatened abuse of their privileges.

They can enter upon such an undertaking with the full assurance that in safeguarding their own interests they are at the same time defending those of the community at large. Concerted action among the medical men of Goulburn Valley district, however, can only be rendered effective in this matter, by the active co-operation of representatives of the profession living outside the area where the strife is going on. Under no circumstances should a medical man apply for a position on any of the lodges of the district without at first communicating with the hon. secretary of the Goulburn Valley District Branch of the British Medical Association.

The question is in no sense one in which the profession combines for selfish ends. Space will not permit us to enlarge on the evils arising

from the establishment of societies for the cheapening of medical attendance upon the sick, where such organisation is conducted by laymen, who, to put it charitably, are not fully seized of the abuse certain to result from all such misguided efforts. Ill-advised action of the kind indicated, always has, and always will, lead to disaster to the health of the public.

We, therefore, appeal only to the best instincts of our *confreres* in urging them to lend their support to their brethren of the Goulburn Valley district, resting assured that in maintaining the rights of the profession in their immediate neighbourhood they are also vindicating the just claims of the faculty throughout Australia.

LONDON LETTER.

THE NEW INEBRIATES' ACT — PUBLIC SLAUGHTER-HOUSES — COMPENSATION FOR DESTRUCTION OF DISEASED ANIMALS — KISSING THE BIBLE — DR. COLLING- WOOD.

It is satisfactory to know that in the New Inebriates' Act we have a determined attempt to tackle the difficult question of the treatment of habitual drunkards and drunken criminals. The inefficacy of short sentences upon persons for being drunk and disorderly has been proved over and over again. In the new Act we have provision made for attempts at reforming the characters of these unfortunate people. The Home Secretary, Sir Matthew White-Kidley, has sent a circular letter to the Judges, Chairmen of Quarter Sessions and Recorders, suggesting a general line of action. The Treasury have decided to grant 10s. 6d. per week per inmate committed under section 2 of the Act, and 16s. per inmate committed under section 1, towards the expenses of maintenance of inebriates in private institutions. These institutions will be certified under the regulations already issued. The period of detention is to be for not less than one year, the detention to be reformatory, not punitive. Full reformatory treatment, together with the term of probationary freedom under license, cannot be successfully carried through under eighteen months to two years, even in most favourable cases. For the class of inebriate criminals, the Court "has the power to send an offender to a certified reformatory, and also to postpone the reformatory treatment until after completion of preliminary sentence of penal servitude or imprisonment, a power which it may be anticipated will be exercised in every case in which the offence proved is one which in public interest calls for punishment." As soon as an estimate can be furnished of the probable number of inebriate criminals, a State reformatory is to be established. In this connection, the report of the Industrial Farm Colony, near Reigate, for the year 1898, just published, is interesting. The farm consists of a colony village, and the most important feature of the scheme is the arrangement for the "recognition of the individual in the patient." Outdoor occupation is given to the inmates as far as possible. During the last two years, out of 112 cases under treatment, 55 have proved successful cures, 25 failed. The necessity for some provision for reform of drunkards becomes painfully manifest when we read

that in England the alcoholic drink consumed amounts to 31 gallons per annum for every man, woman and child!

The attempt to secure the abolition of private slaughter-houses and the establishment of municipal abattoirs under the control of the London County Council has been temporarily defeated. Since the proposal was made, the London Butchers' Society have been vigorously opposing it, and the result has been that the motion on the subject at the Council meeting was defeated by a large majority.

The question of compensation for destruction of diseased animals has been solved at Grimsby, where, at a meeting of farmers, cattle dealers, and auctioneers, it was resolved,—“That for two months the farmer should pay one shilling per head of cattle sold at Grimsby, and the butcher buying also pays the same amount, the money to be banked in the names of a farmer, the butcher, and an auctioneer, and that from this fund full compensation should be paid when a beast was diseased.” This seems a very fair and reasonable plan, and its working will no doubt be watched with interest.

Some few days ago a New York magistrate announced that he would not allow witnesses to kiss the Bible when they took the oath in court. Other magistrates have forbidden the kissing of the book also. The reason for this decision appears to be that recently a young woman, a witness in court, kissed the Bible in the ordinary way, and a few days later contracted a “leprous” disease from which she died in great agony. The physicians in attendance were satisfied that she contracted the disease from the Bible.

Many of your readers will regret to hear of the serious illness of Dr. David Collingwood, of Summer Hill. Since his arrival in England he has had a return of his old pulmonary trouble, and is now in a serious condition. He has been ordered away to the north of Africa.

London, February 1st, 1899.

AN AMERICAN TEXT-BOOK OF GENITO-URINARY DISEASES, SYPHILIS, AND DISEASES OF THE SKIN. Edited by L. Bolton Bangs, M.D., Consulting Surgeon to the St. Luke's Hospital and the City Hospital, New York, and to the Methodist Episcopal Hospital; Visiting Genito-Urinary Surgeon to St. Mark's Hospital, New York, &c., &c.; and W. A. Hardaway, A.M., M.D., Professor of Diseases of the Skin and Syphilis in the Missouri Medical College, St. Louis, &c., &c. Illustrated with 300 engravings and 20 full-page coloured plates. Philadelphia: W. B. Saunders, 1898.

This book, which consists of 1202 pages besides a good index, is the work of forty-seven different authors, and, as stated in the preface, “will be found to be a comprehensive and detailed presentation of the Diseases of the Genito-Urinary Organs, of the Venereal Diseases, and of the Affections of the Skin.” The editors have not restricted the contributors in respect of the particular views set forth in its pages, but have offered every facility for the free expression of individual opinion. The text has been amply illustrated with typical portraits both in colour and in black and white, and especial attention has been also paid to the reproduction of drawings made under the microscope. The work is divided into two parts, the first consisting of 761 pages, dealing with Genito-Urinary Diseases and Syphilis in their broadest sense. The chapters on Diseases of the Prostate and Diseases of the Bladder being very full, and well illustrated. The second part is sub-divided into two parts: (1) Introduction—

Anatomy and Physiology of the Skin; and (2) Special; the whole forming comprehensive work on Diseases of the Skin. Altogether we can recommend this book as being of special value to the general practitioner, as the diseases here treated of form a large proportion of the cases he is called upon to attend.

METHYLENE BLUE IN EPITHELIOMA.

M. LANDEWIE (*Gazette Hebdomadaire de Médecine et de Chirurgie*, December 18th, 1898), in a thesis before the faculty of Toulouse, after reviewing the various therapeutic applications of methylene blue, asserts that it possesses analgetic, antimalarial and antiseptic properties. But he considers that it has a special action upon neoplastic tissues, which enables it in conjunction with curettage of the diseased parts to give durable cures in cases of cutaneous epithelioma, in which cases it should be preferred to less active measures. In recent cases it assures a rapid cure; in older cases, with extensive destruction, it should be preferred, he thinks, to extirpation with the knife, for it permits better limitation; while, where excision remains the method of election, it can still render useful aid as a preparatory treatment.

EXTRAORDINARY CASE OF PLACENTA PRÆVIA.

M. BOULET and M. Mariage (*Journal des Sciences Médicales de Lille*, January 7th) recently communicated to the Anatomical and Clinical Society of Lille the case of a woman, twenty-five years of age, in whom the placenta was found to occupy the entire area of the dilated uterine os. The only course open was to penetrate through the placenta and perform podalic version, which was accordingly done. There was very little hæmorrhage, and the placenta was expelled soon after the extraction of the child, which appeared to be dead. After fifty-five minutes of artificial respiration, mouth-to-mouth insufflation, hot cloths, &c., the child was brought to life. The examination of the placenta showed that it was complete, and that the child had been born through an opening made in it and situated about two inches and three-quarters from its centre, to which the cord was attached. There were no accidents consequent on the accouchement.

THE PROPOSED INDIAN AND COLONIAL ADDENDUM TO THE BRITISH PHARMACOPEIA, 1898.

WE have received from the General Medical Council advance proofs of the Report on the Proposed Indian and Colonial Additions to the “British Pharmacopœia, 1898.” It must be understood that the report is only a report, or at most a draft addendum, freely open to additions and to alterations, or even admissions, and that suggestions in either of these directions are invited by the Medical Council from Colonial authorities. The following are the additions suggested by the various Australian authorities:—

QUEENSLAND.

ALSTONIA—(alstonia).

The bark of *Alstonia constricta*, *N. v. M.* [].
Characters.—In curved pieces or quills attaining a width of two and a half inches (sixty-three millimetres) or more, and half an inch (twelve millimetres) in thickness. It is covered with a thick periderm varying from one-tenth of an inch to a quarter of an inch (two and a half to six millimetres) in thickness; of an earthy or rust-brown colour, strongly rugose, and

marked with large deeply fissured reticulations, and sometimes bears small white foliaceous lichens. Internally the bark is of a cinnamon-brown colour, and is marked with strong coarse longitudinal striae. On transverse section the bark exhibits the dark-brown periderm covering the inner orange-brown tissues, in which may be observed, with a lens, numerous small shining particles. The fracture is short and granular in the outer layers, but fibrous in the liber portion. It has a faint aromatic odour and a very bitter taste.

Preparation.

Tinctura Alstoniae. (Formula as Tinctura Calumbae, 1898.)

[This bark is suggested for official recognition by the Medical Society of Queensland, and the preparation of extract, pill, and tincture by the Queensland Pharmacy Board.]

BEILSCHMIEDIA—(Beilschmiedia).

The bark of *Beilschmiedia obtusifolia*, Benth. and Hook. (*Nesodaphne obtusifolia*, Benth.) [

Characters.—In flat pieces attaining eight inches (two decimetres) or more in length, and one and a half inches (thirty-seven millimetres) or more in width. It is covered with a coarsely granular periderm of a deep orange-brown colour marbled with patches of a yellowish-brown hue; the tissues beneath the periderm are of a deep amber-brown colour. The inside of the bark is of an amber-brown colour, and has a close satin-like surface marked with very fine striae. It has a close fracture, slightly fibrous in the liber portion. Odour aromatic and spicy, recalling *sassafras* and camphor; taste agreeably spicy and camphoraceous.

Preparation.

TINCTURE BEILSCHMIEDIAE—(tincture beilschmiedia).

	IMPERIAL.	METRIC
Beilschmiedia, in No. 40 powder	.. 3 ounces	.. 100 grammes
Alcohol (90 per cent.)	.. A sufficient quantity	

Moisten the powder with one fluid ounce (or fifty cubic centimetres) of the alcohol, and complete the percolation process. The resulting tincture should measure one pint (or one thousand cubic centimetres).

[Recommended by the Queensland authorities for official recognition. Under which name should it be known, *Nesodaphne* or *Beilschmiedia* ?]

KUPHOBIA PILULIFERA.—[The Victorian authorities suggest the inclusion of this drug and its preparations, but do not support their recommendation in any way. Is there sufficient evidence of the value of the drug to render its admission advisable ?]

VICTORIA.

ACACIAE CORTEX (acacia bark).—[A description is wanted which will satisfactorily cover commercial samples of the barks of *Acacia mollissima*, Willd. and *Acacia decurrens*, Willd. Oak Bark which the *Acacia* Bark seems to represent, does not appear in the British Pharmacopoeia of 1898. Is it desirable now to make the *Acacia* Bark official ?]

ACONITUM NAPELLUS (aconite root).—[Information is required as to whether the Aconite root grown in Victoria corresponds exactly to the Aconite Root described in the Pharmacopoeia. Should it correspond exactly, it will only be necessary to indicate that Victorian Aconite Root is officially recognised for use in the Australasian colonies. Should it not correspond, the Victorian authorities are requested to furnish a description.]

DUBOISIA—(duboisia).

The leaves of *Duboisia myopoides*, R.Br. []
Characters.—Shortly-petiolate, lanceolate, entire leaves; from three to four inches (seven and a half to

ten centimetres) long, and from three-quarters to one inch (eighteen to twenty-five millimetres) broad; thin, smooth, narrowed at both ends; margin slightly thickened. Inodorous, but having a bitter taste.

[The Medical Society of Queensland send a small specimen of the leaves of this plant, and, together with the Queensland Pharmacy Board, recommend various preparations of the plant and of its alkaloid, duboisine, for official recognition.]

The Victorian Branch of the British Medical Association also recommend the inclusion of *Duboisia myopoides*, R.Br., and, with the concurrence of the Pharmacy Board of Victoria and the Pharmaceutical Society of Australasia, give formulæ for Tinctura Duboisiae and for Unguentum Duboisinae.

The late Baron Von Mueller, the Government Botanist, supported the Victorian recommendation, and gave copious references to the chemical, pharmacological, and pharmaceutical literature of the duboisias up to 1884.

The subsequent literature, however, shows that as regards the alkaloid duboisine, it is sometimes hyoscyamine, and sometimes hyoscyne (*Ladenburg*), but never a separate distinct alkaloid, to which such a name as duboisine could properly be applied. The mother liquors of hyoscyamine sulphate, whether from hyoscyamine or from duboisia, yield hyoscyne sulphate (*Schering*). It should be remembered, too, that the alkaloid atropine probably does not exist as atropine in belladonna, but is a product of the alteration of, and is isomeric with, hyoscyamine, said to be the chief and often sole alkaloid in belladonna, and that the so-called daturine of stramonium is hyoscyamine.

That the official recognition of *Duboisia myopoides* as a local medicinal substitute for *Atropa Belladonna*, Linn., or *Hyoscyamus niger*, Linn., is not considered by the Australians to be desirable by reason of any local scarcity of the latter plants, is obvious from the recommendation, by the Victorian authorities, of the official recognition of both belladonna and henbane grown in the colony of Victoria, where, indeed, they are stated, in the Committee's report, to flourish satisfactorily.

Considering the foregoing facts, and that salts of hyoscyamine and hyoscyne are now official, the Medical and Pharmaceutical authorities of Queensland and Victoria are invited to reconsider their recommendations in regard to duboisia and duboisine.

The Queensland authorities draw attention to *Anthocercis viscosa*, R.Br., and *A. Tasmanica*, Hook., as containing an active principle similar to duboisine. Probably this principle also is hyoscyamine or hyoscyne, or a mixture of these two alkaloids.

As to *Duboisia Hopwoodii*, F. Muell., the "pitury" tree of Central Australia, and its alkaloid piturine—said to be allied to but not identical with nicotine—to which the authorities in Victoria draw attention, its pharmacology has not yet been sufficiently determined to warrant its official recognition.

EUCALYPTI GUMMI (*Eucalyptus* Gum).—[The Victorian Authorities recommend that official *Eucalyptus* Gum be limited to the product of *Eucalyptus rostrata*, and suggest a Suppositoria *Eucalypti Rostrata*, a Syrupus *Eucalypti Rostrata*, a Tinctura *Eucalypti Rostrata*, and a Trochiscus *Eucalypti Rostrata*. Information is desired as to the special advantage of thus limiting *Eucalyptus* Gum. Is it desirable to include *Eucalypti Gummi Rostrata* in the Addendum under present circumstances? Would it be satisfactory if the preparations above mentioned were made with the gum as defined in the "British Pharmacopoeia" of 1898? The Lozenge thus made is already official.]

FENICULI FRUCTUS.—(Fennel Fruit).—[A description of the fruit of *Feniculum officinale*, *Feniculum*

vulgare, Mill., desired for official recognition, should be forwarded by the Victorian Authorities, if it differs in any important respect from the Fennel Fruit, now official. In the latter case the distinctive name should be *Fœniculi Fructus Victoriae*—Victorian Fennel Fruit.]

GRINDELIA—(Grindelia).

The dried leaves and flowering tops of *Grindelia squarrosa*, *Dunal*, and *Grindelia robusta*, *Nuttall* []

The leaves of *Grindelia squarrosa* are alternate, pale green, smooth, coriaceous, brittle, oblanceolate, or elongate-oblanceolate, the lower leaves tapering considerably below, but scarcely enlarged, and at the sessile base the involucre bracts are long with reflexed subulate points. The leaves of *Grindelia robusta* are similar in colour and texture, but are shorter, more oblong, and have a cordate amplexical base, are furnished with a few glandular hairs, and are sharply serrate at the margin. The involucre in both species is about half an inch (twelve millimetres) in diameter, and the tips of the bracts are beset with short many-celled glands. Both the involucre and the leaves are more or less covered with glossy patches of exuded resin. The odour is balsamic, and the taste pungently aromatic and bitter.

GRINDELIA ROBUSTA.—[The Victorian authorities suggest the official recognition of this drug and its preparations, but do not support their recommendation by any data. The books allude to it as a remedy in bronchitis, asthma, and whooping-cough, and to *G. squarrosa*, *Dunal*, as a remedy in ague, hay-fever, and malarial diseases. The Pharmacopœia Committee of the Medical Council has therefore provisionally included both species. What preparations are desired?]]

KINO EUCALYPTI (*Eucalyptus Kino*).

The varieties of *Eucalyptus* Gum, or so-called "Botany Bay Kino," which have the characters and respond to the tests of the official (East Indian, Malabar, or Madras) Kino may be used in the Australasian parts of the Empire.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

The Annual General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, March 24th, at 8.15 p.m.

Business:—Report of Council and Treasurer's Statement; Presidential Address; Election of Council.

Members are reminded that the annual subscription for the current year (£2 2s.) is now due, and should be forwarded to the Hon. Treasurer, Dr. Crago, 16 College Street, Sydney.

G. T. HANKINS, Hon. Secretary.

NOTE ON PUBLICATIONS.

We have received from John Wright and Co., of Stonebridge Bristol, England, specimens of a new "case-paper" suggested by Drs. Couch and Lancaster. These papers are in an exceedingly useful form for case taking, and are accompanied on the back by outline figures for accurately noting the position of any abnormality, etc., upon any of the surfaces of the body. They are supplied at 15s. per 500, 26s. per 1,000, or bound in books of 250 copies and indexed and numbered for 11s.

PUBLIC HEALTH.

DR. SPROTT (Officer of Health) reports that during the month of January there were 31 deaths registered in the registration district of Hobart, but four of these were of persons not usually resident in the district. In the city there were 17—males, 9; females, 8—as compared with 86 during the corresponding month last year. The death rate was equal to 6.72 per 1,000 per annum. The principal causes of death were:—Measles, 1; phthisis, 1; tuberculosis, 4; old age, 2; enteritis, 1; atrophy, 2; and the remainder were of a general nature. Of the deaths 7 were under 1 year of age, 3 between 1 and 5 years, 8 between 5 and 65, and 4 over 65 years of age. The total number of births registered was 64—males, 38; females, 26. In the city 50—males, 32; females, 18. The death rate for the month is exceptionally low, and the general health of the city is good.

In his annual report for 1898, Dr. Sprott, Health Officer for Hobart, says:—The total number of deaths registered was 347—males, 180; females, 167. The death rate was, therefore, equal to 11.71 per 1,000 of the population. That there has been a marked and continuous decrease in the death rate during the last ten years is evidenced from the following figures:—

Rate of Mortality per 1,000 in Successive Years.

1889 ...	17.76	1894 ...	15.10
1890 ...	17.25	1895 ...	13.40
1891 ...	19.65	1896 ...	12.97
1892 ...	19.26	1897 ...	12.82
1893 ...	17.81	1898 ...	11.74
Average	18.34	Average	13.60

Surely these figures carry conviction to the most sceptical as to value of sanitation in reducing the death rate in city populations. As it stands now, the death rate is unequalled in any town or city I know, and compares very favourably with the rural districts of Tasmania. Taking the general death rate as an index of the health of the community, Hobart occupies a most enviable position with regard to the other colonial capitals. The death rate for the year 1897 was: in Adelaide, 17.3; Melbourne, 13.6; Sydney, 16.4; London, 18.2; English towns (32), 19.7; Tasmania, 11.5; Hobart, 12.8. The principal causes of death were:—Influenza, 2; measles, 7; typhoid fever, 24; diarrhoea, 12; cancer, 14; phthisis, 20; tuberculosis, 12; premature birth, 8; old age, 41; apoplexy, 8; diseases of heart and circulatory system, 28; enteritis, 24; Bright's disease, 6; atrophy or inanition, 23; accident or negligence, 6; and the remainder were of a general nature.

The annual report of the Health Officer (Dr. T. Borthwick) for the towns of Kensington and Norwood, S.A., for 1898 contains the following passages:—**Typhoid Fever.**—Of the total number five were imported into the town, leaving 50 to be accounted for. It is noteworthy that the large majority of cases occurred in the December quarter. This outbreak was the subject of a special report to the Board at the time of its occurrence. Twenty-one cases were traced to a Sunday-school picnic, at which the water obtained from a creek were probably at fault. Ten cases seemed to be associated with a local milk supply. Three cases were imported, and the remaining eight were sporadic cases of doubtful origin. Fortunately the outbreak

was got well in hand, and the energetic methods adopted were successful in checking the spread of the disease. As a matter of fact it is doubtful if any secondary cases occurred at all, although the typhoid season of the year just followed the outbreak. It will be interesting to see whether any cases arise this season within the infected area. The Board adopted a new departure, and one which might with advantage be adopted by other boards in dealing with similar outbreaks, viz., the employment of a trained nurse to visit all the affected houses and show practically how to apply disinfectants efficiently. Indeed, I should like to see a trained nurse as a permanent part of the sanitary organisation of every town, because she has an advantage over the ordinary inspector in being able to enter the sick-room without causing friction. The Board was, further, the first to utilise efficiently the services of bacteriology in enabling doubtful cases of the disease to be detected, and in having the suspected water examined. The cases of typhoid fever occurring in the remaining quarters of the year were such as usually occur at these seasons, and it is evident that, allowing for the outbreak referred to and the imported cases, this disease has not been unduly prevalent during the year. *Scarlet Fever*.—This disease showed symptoms of becoming epidemic in the June quarter, but these have subsided. Steps were taken to control its spread by issuing a special warning to all school authorities as to the danger to be guarded against in regard to the spread of infection, and it is satisfactory to know that these authorities gave the matter their best attention. *Diphtheria*.—This disease has been conspicuous by its rarity during the year, only three cases having been reported. In no previous year has so few cases occurred, although last year was fairly free from the disease. I think the gratifying position of these two years is owing largely to the protection afforded to the community by the new isolation wards of the Children's Hospital, and by the facilities afforded by the bacteriological laboratory of diagnosing doubtful cases of the disease. *Measles*.—This disease began to show itself in the June quarter, and has gone on increasing since. It seems to have replaced the outbreak of scarlet fever, but I do not anticipate such an epidemic as occurred in 1898. This disease cannot possibly be controlled by local boards acting singly, but control might result from conjoint action, and much suffering and many deaths be prevented. *General Remarks*.—I find nothing in the foregoing statistics to make one suspect the sanitary condition of the town. It has been constantly under inspection, and has been maintained at the usual standard.

VITAL STATISTICS.

SYDNEY.—There were 1,084 births and 511 deaths registered in Sydney during January. The principal causes of death were:—Measles, 8; typhoid fever 10; scarlet fever, 2; bronchitis, 7; pneumonia, 28; cancer, 27; phthisis, 44; whooping cough, 50. There were 8 suicides.

MELBOURNE.—The chief causes of death in greater Melbourne during January were as follows:—Diphtheria, 1; cancer, 40; phthisis, 54; whooping cough, 30; bronchitis, 8; typhoid fever, 22; pneumonia, 28. There were 600 deaths registered during the month.

BALLARAT.—There were 4 deaths from whooping cough, 2 from cancer, 4 from phthisis, and 5 from pneumonia during the month of January.

ADELAIDE.—There were 61 births and 100 deaths in Adelaide during December. The principal causes of death were:—Measles, 2; whooping cough, 2; cancer, 4; phthisis, 5; old age, 9; pneumonia, 7; enteric fever, 5; enteritis, 4.

TASMANIA.—The Government Statistician's report on vital statistics of the colony shows that during the month of January 109 births were registered in Hobart and Launceston. This is a decrease of 18.6 as compared with the average of the births registered in January during the last five-yearly period. To every 1,000 of the population of the two districts the proportions of births registered were as follow:—For Hobart, 1.58; for Launceston, 1.75; all, 1.64. Deaths.—The deaths registered in January in Hobart and Launceston numbered 57. The total number of deaths registered in the two districts during January, 1899, shows a decrease of 35.4 as compared with the average number of deaths registered in January during the last five-yearly period. To every 1,000 of the population of the respective divisions the proportions of deaths registered were as follow:—Hobart, 77; Launceston, 1.01; all, .86. The deaths under 5 years of age numbered 21, or 36.84 per cent., of which 12 were under 1 year of age.

WESTERN AUSTRALIA.—During the quarter ending December 31, 1898, there were 12 deaths from measles, 26 from typhoid fever, 49 from diarrhoea and dysentery, 15 from cancer, 28 from phthisis, 39 from pneumonia, 66 from enteritis, 47 from accident, and 9 from suicide.

UNIVERSITY AND COLLEGE INTELLIGENCE.

Dr. George E. Rennie, recently of Sydney, has passed the M.R.C.P. London examination, and was admitted to membership by the President at a comitia held on Jan. 26 ult.

MEDICAL NOTE.

Medical Magistrate.—Dr. Cecil Lucius Strangman, of Orroroo, S.A., has been made a Justice of the Peace for South Australia.

MILITARY INTELLIGENCE.

NEW SOUTH WALES.—The Governor, with the advice of the Executive Council, has been pleased to approve of the following appointments, promotions, etc.:—*New South Wales Army Medical Corps* (Partially-paid Establishment): Lieutenant Leslie James Lamrock resigns his commission; Lieutenant George Lane Mullins, from Volunteer Establishment, to be Lieutenant. *Volunteer Establishment*: Lieutenant George Lane Mullins is transferred from the Volunteer to the Partially-paid Establishment; Robert Beith, gentleman, M.B., C.M. Glas., to be Lieutenant; George Dundas, gentleman, M.R.C.S. Eng., and L.S.A. Lond., to be Lieutenant.

NEW ZEALAND.—His Excellency the Governor has been pleased to approve of the undermentioned appointments:—*First Battalion, Wellington Rifle Volunteers*: Surgeon-Major Thomas Cahill, Wellington Guards Volunteers, and Surgeon-Captain Francis Wallace Mackenzie, to be Medical Officers with their present rank.

CHANGE OF ADDRESS, ETC.

ALLAN, Dr. R. J., late of Chatswood, has gone to Balmain, Sydney.

BROUGH, Dr. C. A., has settled at South Brisbane.

COOLEY, Dr. P. G., late of the Coast Hospital, Little Bay, Sydney, has commenced practice in Cleveland-street, Redfern, Sydney.

CROOKS, Dr. A. W., has removed from Corryong, Vic., to Gundagai, N.S.W.

DENNIS, Dr. G. E., late of the Brisbane Hospital, has gone to Warwick, Q.

FARMER, Dr. W. H. F., late of Wyndham, is now practising at Esperance, W.A.

FINLAY, Dr. Wm., has left Auckland, N.Z., for Australia.

GOING, Dr. J. A., has removed from Mungindi to Sherwood, near Brisbane.

JOHNSON, Dr. M. S., a recent arrival, has settled at Jarrahdale, W.A.

KENNY, Dr. G. G., late of Hamilton, Waikato, has gone to Rotorua, N.Z.

LANCASTER, Dr. L. B., late of Warwick Hospital, Q., has removed to Wagerup, near Bunbury, W.A.

LAWSON, Dr. G. L. L., late of W.A., has commenced practice at Berry-street, North Sydney.

MATTHEWS, Dr. J. F., late of Yea, has succeeded to Dr. Thwaites' practice at Tallangatta, Vic.

MOFFITT, Dr. J. E., has removed from Greenough to Bulong, W.A.

MURDOCH, Dr. J., late of Christchurch, has settled at Cambridge, Prov. Auckland, N.Z.

OWENS, Dr. E. M., formerly of Brisbane, has succeeded to Dr. D. S. McCall's practice at Richmond, Vic.

PALMER, Dr. A. A., has commenced practice at 149 Elizabeth-street, Hyde Park, Sydney.

PULLINE, Dr. R. H., late of Prince Alfred Hospital, Sydney, has commenced practice at Beaudesert, Q.

THOMAS, Dr. G. H. W., has removed from Childers to Mareeba, Q.

TOWNLEY, Dr. P. L., has removed from Muttaborra to Gayndah, Q.

MEDICAL APPOINTMENTS.

The following medical appointments are announced :-

Altman, C. A., M.R.C.S. Eng., &c., to be Acting Public Vaccinator at Bright, Vic.

Bowman, A. S., M.B. &c., to be Government Medical Officer and Vaccinator for Singleton, N.S.W., also Medical Attendant on the Aborigines in that district.

Coane, J., L.R.C.S., &c., to be Public Vaccinator at Yackandandah, Vic., vice the late Dr. A. Miller.

Crowley, C. G., M.B., &c., to be Public Vaccinator at the Women's Hospital, vice Dr. W. B. Decker, resigned.

Dennis, G. E., to be Resident Surgeon at Warwick Hospital, Q., vice Dr. Lancaster, resigned.

Deravin, H. A., M.B., &c., to be Acting Public Vaccinator at Inglewood, Vic., vice Dr. E. A. Deravin, on leave.

Farmer, Wm., to be Health Officer for Esperance, W.A.

Greig, W. C., M.D. Edin., &c., to be a Public Vaccinator for Birmingham District, N.Z.

Hepworth, A. F., L.R.C.P., &c., to be Public Vaccinator at Tungamah, Vic., vice Dr. E. J. Connell, resigned.

Jamison, A., M.D., &c., to be Health Officer and Analyst for Cottesloe, W.A.

Kenny, G. G., M.B., M.S., &c., to be Resident Medical Officer of the Sanatorium at Rotorua, N.Z.

Knipers, J. C., M.D. Univ. Jena, to be Acting Medical Officer at Roma, Q., during the absence of Dr. G. S. L'Estrange.

Lamb, Robert, M.B., C.M. Edin., &c., to be Government Medical Officer and Vaccinator for the district of Molong, N.S.W., vice Dr. H. Browne, resigned.

Martin, J., L.R.C.P., &c., to be Public Vaccinator at Broad Arrow, W.A.

Matthews, J. F., M.R.C.S. &c., to be Public Vaccinator at Tallangatta, Vic., vice Dr. J. S. Thwaites, resigned.

Reid, E. W., M.B., C.M. Edin., to be Junior Medical Officer at the Hospital for Insane at Parramatta, N.S.W.

Robinson, L., M.D., Ch.M. Irel., to be Medical Officer and Health Officer at Gladstone, Q., vice Dr. C. G. Thorp, resigned.

Simpson, D., M.B., &c., to be Public Vaccinator at Ferntree Gully, Vic., vice Dr. J. Higgins, resigned.

Smith, V. A. J., L.R.C.S.I., &c., to be Government Medical Officer and Vaccinator for the district of Grafton, N.S.W., vice Dr. C. Hedley, resigned.

MEDICAL RESIGNATIONS.

The following medical resignations are announced :-

Browne, Dr. H., as Government Medical Officer and Vaccinator for district of Molong, N.S.W.

Connell, Dr. E. J., as Public Vaccinator at Tungamah, Vic.

Higgins, Dr. J., as Public Vaccinator at Fern Tree Gully, Vic.

Lancaster, Dr., as Resident Surgeon at Warwick Hospital, Q.

Thorp, Dr. C. G., as Medical Officer and Health Officer for Gladstone, Q.

OBITUARY.

ALFRED WATSON MORTON, L.R.C.P., L.R.C.S. Edin., L.F.P.S.G. 1898, late of Hawthorn, Melbourne,

died at Brisbane on February 11th, aged 25 years.

JOHN HENRY PEACOCK OLDMEADOW, M.B.Q.S. Eng. 1851, died at his residence, Sandy Bay, Hobart

Tas., on January 8th, aged 70 years. Deceased, prior

to taking up his residence in that colony in 1857, had

acted as surgeon to several emigrant ships, notably the

Chatham and Great Tasmania. He retired from active

service about ten years ago, after a most successful

career. He was held in great esteem both by his

patients and professional brethren. He leaves a widow

and four sons (one of whom is practising Medicine in

London) and one daughter.

MAURICE JOHN O'CONNOR, L.R.C.S.I., M. & L. Mid., K.Q.C.P.I., died in Sydney on March 9th, aged

42 years. Dr. O'Connor, who was a native of Sydney,

was formerly Surgeon at Darlinghurst (Sydney) Gaol

and an Honorary Surgeon at the Sydney Hospital.

He was lately appointed Medical Officer to the Public

Institutions at Parramatta. He was also a member of

the N.S.W. Medical Board.

NOTE ON PUBLICATIONS RECEIVED.

The Hon. Librarian of the New South Wales

Branch of the British Medical Association is indebted

to Messrs. Angus and Robertson, of Castlereagh-street,

Sydney, for a volume entitled "An Anatomical

Dissertation upon the Movement of the Heart and

Blood in Animals, being a statement of the discovery

of the circulation of the blood, by William Harvey,

M.D., Physician-extraordinary to King James the

First, Physician-in-Ordinary to King Charles the

First; and Professor of Anatomy in the Royal

College of Physicians in London." Only one hundred

large paper copies (demy quarto) were re-issued, of which

the copy thus presented to the library is numbered 90.

TO MEDICAL PRACTITIONERS.

A well-appointed Detached Residence of nine rooms,

kitchen, etc., corner of Bondi-road and Penkivil-street,

Bondi (on tram line), for sale. One-third cash;

balance at 4½ per cent. Full particulars and cards to

view from "ALPHA," P.O., North Sydney.

REVIEWS.

THE PRACTICE OF MEDICINE. By Horatio C. Wood, A.M., M.D., LL.D. (Yale), Professor of Therapeutics and Clinical Professor of Nervous Diseases in the University of Pennsylvania, &c., and Reginald H. Fitz, A.M., M.D. Hersey Professor of the Theory and Practice of Physic in Harvard University, &c. Philadelphia: J. B. Lippincott and Co. Sydney: Charles Markell and Co., 15 O'Connell-street.

This is a very handsome octavo volume of about 1,100 pages. It is the outcome of an attempt to view the practice of medicine from the pathological and therapeutical points of view. The therapeutical portions are the work of Dr. Wood, and the pathological articles are contributed by Professor Fitz. It will therefore be seen that some of the highest talent in the American school has been sought in the preparation of what we may well call an original and complete system of medicine.

The work is divided into six sections:—I., General Diseases; II., Nervous System; III., Circulatory Apparatus; IV., Respiratory Apparatus; V., Digestive Apparatus and Peritoneum; VI., Urinary Apparatus. There are also two appendices containing Formulae and Temperature Charts, together with a complete index.

The style of the authors is concise, and there is no padding of articles, as is so often seen in such works. We are especially struck with the chapter on Tuberculosis. This subject is treated at length, as befits its importance, and is truly excellent. The chapters on Nervous Diseases also call for special comment. Look where you will throughout the volume there is the same evidence of learning, originality, and carefulness. It is valuable alike to the student and younger practitioner. Even older practitioners will find their store of medical knowledge considerably increased by a study of its pages. It should become a text-book in medical schools.

We have read it with great pleasure and profit, and advise our readers to "go and do likewise."

THE TREATMENT OF DISEASE BY PHYSICAL METHODS. By Thomas Stretch Dowse, M.D., Abd., F.R.C.P. Edin., formerly Physician Superintendent Central Sick Asylum, &c. Bristol: John Wright and Co., 1898. Price, 7s. 6d. net.

This is an expansion of Dr. Dowse's former work, "Lectures on Massage and Electricity in the Treatment of Disease," published some time ago. The general style of the book has not undergone any material change, but new and important matter has been added which brings it up to date.

Massage and electricity are undoubtedly coming to the fore in the treatment of many diseases hitherto looked upon as incurable, and this work comes at an opportune time.

Opening with lectures on the principles of massage and its methods of application, the author describes massage of the various parts of the body, and then enumerates the diseases for which such treatment is particularly suitable. The Weir-Mitchell treatment, and the Nawheim or Schott treatment in diseases of the heart, are also mentioned at some length. There are chapters on Electro-Physic and Electro-Therapeutics. There are four plates showing the motor points in the upper and lower extremities, and in addition there are 78 figures in the text.

The volume is very interesting.

MANUAL OF DISEASES OF THE SKIN. By L. Duncan Bulkley, A.M., M.D., Physician to the New York Skin and Cancer Hospital; Dermatologist to the Randall's Island Hospitals, &c. Fourth edition, 1898. New York and London: G. P. Putnam's Sons.

This is an excellent manual of an elementary character. The work, now in its fourth edition, has been thoroughly revised, re-written and greatly improved. It is thoroughly practical; the descriptions of the various affections of the skin are plain and to the point. Differential diagnosis has not been fully entered upon for want of space, but in connection with eruption mention is made of those with which each may be confounded. A chapter is devoted to the analysis of good skin cases. Considerable attention has been paid to therapeutics, and this adds to the value of the work. There is a very good "formulary" and a well-compiled index. There are, unfortunately, no illustrations, but of course in a work of such moderate dimensions such could hardly be expected.

TEXT-BOOK OF HISTOLOGY, INCLUDING THE MICROSCOPIC TECHNIQUE. By Dr. Philipp Stohr, Professor of Anatomy in the University of Würzburg. Second American from eighth German edition. Translated by Dr. Emma L. Billstein, and edited (with additions) by Dr. Alfred Schaper, Demonstrator of Histology and Embryology, Harvard Medical School, Boston, Mass., &c. Philadelphia: P. Blakiston's Sons and Co., 1898. Sydney: L. Bruck. Price, 12s. 6d.

Stohr's text-book is well known to students of histology throughout the world. In Germany it is considered indispensable to the student, and in America it has had a large sale. It has been translated into Italian, French, and Russian. Therefore little criticism of such a well-known work is superfluous.

Although specially intended for students, the advanced worker in histology will find matter for consideration, and, aided by a large number of illustrations, will find many suggestions for technical purposes. The preparation of almost all of the specimens enumerated can be made simply by means of teasing, isolation, or cutting with a razor; but students who have a microtome at their disposal will also find in an Appendix brief directions for the preparatory treatment (embedding in paraffin, &c.) of specimens for cutting with the microtome.

The illustrations are unusually clear, and make laboratory work a pleasure. The work is divided as follows.—Part I., General Technique; Part II., Microscopic Anatomy, Appendix. A carefully compiled Index completes the volume.

A MANUAL OF PHYSIOLOGY. By G. N. Stewart M.A., D.Sc., M.D., Edin., D.P.H., Camb., Professor of Physiology in the Western Reserve University, Cleveland; formerly George Henry Lewes student; Examiner in Physiology in the University of Aberdeen, &c. Third edition, 1899. London: Baillière, Tindall, and Cox. Sydney: L. Bruck. Price, 16s. 6d.

The first edition of this work appeared in 1895, the second was a reprint. In the present edition the book has been revised, and in parts re-written. A considerable amount of new matter has been added, especially in the Practical Exercises.

It is very complete. There are some fourteen chapters in all, and attached to each are practical Exercises for use in the physiological laboratory.

We cannot speak too highly of this work. Well written, it contains all the student or practitioner need know under ordinary circumstances. The practical Exercises are well selected and well described. The illustrations (there are five coloured plates and 300 black and white illustrations) are excellently done, and serve to make clear the text.

The volume, which is one of Messrs. Baillière, Tindall, and Cox's University Series, should have a large sale.

TRANSACTIONS OF THE ROYAL ACADEMY OF MEDICINE IN IRELAND, vol. xvi. Edited by John B. Story, M.B., F.R.C.S., General Secretary. Dublin: Fannin and Co., Ltd., 1898.

This volume of transactions contains the papers read before the various sections of the Royal Academy of Medicine in Ireland during the session 1897-98.

In the section of Medicine there are papers by Sir George Duffey, Drs. J. W. Moore, J. M. Finney, W. G. Smith, and others. In the section of Surgery papers by (among others) Sir William Thompson, Messrs. H. G. Croly, R. F. Tobin, &c. The Clinical Report of the Rotunda Lying-in Hospital is published in the section of Obstetrics. It is contributed by Drs. R. D. Purefoy, T. H. Wilson, H. Jellett and B. G. R. Lyle. In the other sections papers are contributed by Drs. A. H. Benson, H. T. Bewley, E. H. Bennett, Wheeler, Langford Symes, A. Bermingham, and Professor Symington.

The volume is fully equal to its predecessors, and this is saying a great deal.

ATLAS AND EPITOME OF OPERATIVE SURGERY. By Otto Zuckerdandl, Privat-Dozent in the University of Vienna. Edited by J. Chalmers Da Costa, M.D., Clinical Professor of Surgery in Jefferson Medical College, Philadelphia, &c. Authorised translation from the German, with 24 coloured plates and 217 illustrations in the text. Philadelphia: W. B. Saunders, 1898. Price, 12s. 6d.

Here we have a beautiful atlas of operative surgery at a moderate price. The coloured plates are splendidly done, and show the details of the various operations clearly. The figures in the text help to elucidate many points not easily grasped from a mere description. It is undoubtedly the best atlas of operative surgery of small size we have yet seen, and it should become a favourite in the profession. It contains full illustrated descriptions of all those operations usually required in ordinary practice.

The price of the work brings it within the reach of everyone.

A SYNOPSIS OF THE BRITISH PHARMACOPOEIA, 1898. Compiled by H. Wippl Gadd. London: Baillière, Tindall and Cox, 1898. Price, 1s.

This handy little pocket volume is in its third edition, and its aim is to show concisely in what way the British Pharmacopoeia of 1898 differs from that of 1885, and also to give a complete synopsis of the new work. It is exceedingly useful, and should command a ready sale.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

The following persons, having presented their diplomas, have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Blackburn, Charles Bickerton, M.B. Sydney 1899.
Brannan, Henry John Wolverton, M.B. Sydney 1899.
Cargill, William Duthie, M.B. Sydney 1899.

Fairfax, Ernest Wilfred, M.B. Sydney 1899.
Ludowici, Edward, M.B. Sydney 1899.
Magarey, Frank William Ashley, M.B. Sydney 1899.
MacMaster, Donald James Dunlop, M.B. Sydney 1899.
Sandes, Francis Percival, M.B. Sydney 1899.
Wilson, Thomas George, M.B. Sydney 1899.
Parsons, Warren, M.B. Univ. Melb. 1896.
Palmer, Arthur Aubrey, M.B. et Mast. Surg. Univ. Edin. 1894, Fell. R. Coll. Surg. Edin. 1896.
Rutherford, Alexander Hamilton, M.B. et Mast. Surg. Univ. Edin. 1896.
Hamilton-Kenny, Frederick, M.R.C.S. Eng. 1882, L.S.A. Lond. 1881.
Edmonds, Henry Augustus, Lic. R. Coll. Phys. Lond. 1889, Mem. R. Coll. Surg. Eng. 1899.
Marks, Herbert William James, M.D., Bac. Surg. Univ. Camb. 1898.
Orchard, William Henry, M.B. Univ. Melb. 1898.
McBurney, Robert, Lic. R. Coll. Phys. Edin. 1868, Lic. R. Coll. Surg. Edin. 1868.
Eroole, Quinto, M.D. et Ch.D. Univ. Bologna 1896.

For Additional Registration.

Ellis, Lawrence Edward, M.Ch. Univ. Sydney 1896.
Hall, Edwin Outberr, M.Ch. Univ. Sydney 1898.

NEW ZEALAND.

McMunn, Robert Sydney, M.D. Univ. Manitoba 1897.
Borrie, William Henry, M.B., C.M. Univ. Edin.

QUEENSLAND.

Anderson, Henry, M.D. R. Univ. Irel. 1884.
Brough, Charles Allan, Lic. R. Coll. Phys. Edin. 1892, Lic. 1892, Fell. 1896, R. Coll. Surg. Edin., Lic. Fac. Phys. Surg. Glas. 1892, M.B. Bac. Surg. 1896, Univ. Durh.
Robinson, Leonard, M.D. and Ch.M. 1892, R. Univ. Irel.

SOUTH AUSTRALIA.

Hains, George Myer, M.B. Melb. 1898.

VICTORIA.

Martin, Albert Edward, M. 1889, F. 1897, R.C.S. Eng.; L.R.C.P. Lond. 1889; M.B. 1889, M.D. 1892, Durham.
Retallack, Cyrus, L.R.C.P. et R.C.S. Edin. et L.F.P.S. Glas. 1896.
O'Sullivan, Florence Ulrick, L.R.C.P. Edin. 1893; L. 1893, F. 1897, R.C.S. Edin.; L.F.P.S. Glas. 1893.
MacKenzie, William Colin, M.B. Melb. 1898.
Thompson, James, M.B. Melb. 1898.
Praeger, George Daniel, M.B. Melb. 1898.
Spowers, Edward Augustus, M.B. Melb. 1898.

WESTERN AUSTRALIA.

Smith, Johnson Marion, M.B., C.M. Glas. 1892.

BIRTHS, MARRIAGES, AND DEATHS.

BIRTHS.

BURKITT.—On the 11th February, at Manly, Sydney, the wife of E. H. Burkitt, M.B., of a daughter.
GOOD.—On the 6th February, at "Devon House," Prospect, Adelaide, South Australia, the wife of J. Ernest Good, M.B., O.M., of twin daughters.
IRWIN.—On the 23rd February, at Wandermere, Singleton, N.S.W., the wife of William Irwin, M.B., &c., of a daughter.
MATTILAND.—On the 10th February, at No. 6 Lyons-terrace, Hyde Park, Sydney, the wife of Dr. H. L. Mattiland, of a son.
SHUTER.—On the 13th February, at Port Augusta, South Australia, the wife of R. E. Shuter, M.B., J.P., of a daughter.
TRESIDDER.—On the 10th February, at Young, N.S.W., the wife of Stanley Tresidder, M.R.C.S. Eng., L.R.C.P. Lond., of a daughter.

MARRIAGES.

HOWSE—CONROY.—On the 18th January, at Neutral Bay, Sydney, by the Rev. G. North Ash, M.A., Alfred Oswald Howse, M.R.C.S., L.R.C.P., Hurstville, son of the late Alfred Howse, M.R.C.S. Lond., to Dixie Elizabeth Juliet, daughter of James Macdowall Conroy, "Kievara," Neutral Bay.
MACPHERSON—VICKERS.—On the 16th February, at Christ Church, South Yarra, Vic., by the Rev. Canon Tucker, John Macpherson, M.A., M.B., Ch.M., third son of the late Rev. P. Macpherson, M.A., to Ruby M., daughter of the late Charles Cass Vickers, Esq., Melbourne.

DEATHS.

HART.—On the 23rd February, at Bingara, N.S.W., John Berry (Jacky), eldest son of John W. Hart, M.B., aged 7 years.
MORTON.—On the 11th February, at Brisbane Hospital, Dr. Alfred Watson Morton, late of "Arcadia," Burwood-road, Hawthorn, Melbourne, beloved son of W. N. Morton, and brother of Dr. F. W. W. Morton, aged 28 years.
O'CONNOR.—On the 8th March, at Darlinghurst, Dr. Maurice J. O'Connor, aged 41 years, from pneumonia. R.I.P.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

PRESIDENTIAL ADDRESS.

By W. CHISHOLM, M.D. LOND., M.R.C.S. ENG.,
B.A. SYD., SYDNEY.

DELIVERED AT THE ANNUAL MEETING OF THE
N.S.W. BRANCH OF THE BRITISH MEDICAL
ASSOCIATION ON 24TH MARCH, 1899.

CUSTOM ordains that before retiring into the not uncongenial obscurity from which, owing to your suffrages, I have during the past twelve months been temporarily withdrawn, I should address you on matters connected more or less with our profession, and bring before you the chief events of the year as they concern us as members of the New South Wales Branch of the British Medical Association.

In the first place, I beg to tender you my most sincere and grateful thanks for the high distinction you conferred upon me last year in electing me to the office of President—an office which, it is true, does not entail a great amount of work but which in these days of unrest and change does at times call for the exercise of certain qualities and abilities which, I am fully conscious, I do not possess in a high degree. For your sympathy and indulgence on my shortcomings I gratefully acknowledge my debt. I have endeavoured to maintain the honour of our Branch, and trust that it has not suffered through any fault of mine.

You will learn from other sources the satisfactory condition of our Branch, which now numbers 373 members.

Dr. Rennie, who has done so much good work for the Branch, resigned the office of Secretary towards the end of August. In recognition of his very valuable services, he was presented, prior to his departure for London in September last, with a purse of sovereigns and an illuminated address, by the members of the New South Wales Branch of the British Medical Association and the Sydney and Suburban Provident Medical Association. The Council was fortunate in securing Mr. Hankins as his successor, whose ability, sound judgment and knowledge of our affairs fit him to adequately fill the vacancy. I wish I could say something to sufficiently bring to your notice the great obligations we are under to our Editor, Dr. Knaggs, and our Honorary Treasurer, Dr. Crago. It is difficult for most of you to realise the amount of valuable time and energy they

devote to the affairs of the journal and the Association. They, as also Mr. Green, our capable and obliging Assistant-Secretary, deserve our heartiest thanks.

Death, for his yearly tribute, has called many from our ranks. Sir Alfred Roberts, who as Mr. Alfred Roberts, had been honourably associated with medical and surgical practice in Sydney for many years, died at Blackheath last December. He was elected President of this Branch in 1884, but owing to ill-health could not take up the duties, and the office was filled by Dr. F. H. Quaife. He should be gratefully remembered as being the one through whose instrumentality the system of trained nursing has been established amongst us. But the work by which he will be best remembered is the Prince Alfred Hospital, which has reached its present state of perfection almost entirely through his untiring energy, knowledge of his subject, minute attention to details and assiduous care. It will be a lasting monument of his labours for the people of his adopted country. For his services in connection with this hospital, Her Majesty conferred upon him the honour of Knight Bachelor in 1883. He was a type of the refined English gentleman, and the community is the poorer for his death. He was buried on the 21st December at the Waverley Cemetery—the funeral was a solemn and imposing ceremony, such as he would have wished it to be.

I have regretfully to add the names of the following members of our Branch:—Heinrich Lilie, Joseph Edmund Oram Henry, Thomas Primrose Anderson. Other late members of the profession, whose names will doubtless, to some or other of you, recall old memories, are James Lawler Donovan, Allen Bradley Morgan, Leslie Thomas Hollis, Austin Nathaniel Cooper, Charles Hedley, Maurice O'Connor, and Alexander Skinner, the oldest practitioner in the colony.

Be not afraid, ye waiting hearts that weep,
For God still giveth His beloved sleep,
And if an endless sleep He wills, so best.

Many excellent papers have been read during the year, but I regret to have to repeat the old story, that too much of our time is given up to the discussion of matters which are considered to affect our dignity and the honour of the profession, to the neglect of the scientific and clinical side of our work.

With regard to a resolution which was passed at the last meeting of the year, and which chiefly concerns the relations of medical men

with a certain benefit society, the last word has not been said. This resolution was, perhaps, as reasonable a one as could have been expected, judging from the temper of the meeting—but, as to the wisdom of it, there is, in my mind, much room for doubt. Whatever happens, do not, I pray you, let us have any more veiled threats of wholesale resignation, because certain local medical associations may not be able to force their views upon the whole Branch. Think well before you do anything calculated to destroy this Association. What kind of a structure, think you, will you be able to raise up out of its ruins?

The Council during the year has been frequently referred to in connection with differences arising between medical men. That they have not always been able to give decisions, which have been satisfactory to all concerned, is not to be wondered at.

We must not stint
Our necessary actions, in the fear
To cope malicious censurers.

And so, we have endeavoured to act fearlessly and honourably towards all men.

I might respectfully remind you that your Council is what you yourselves make it, and if members do not trouble to nominate, and endeavour to secure the election of new men, it is fair to assume that you are satisfied with what you have got. At the same time, it is worth consideration, if the principle of providing new blood, by the compulsory retirement of a certain number of councillors annually, might not be adopted with advantage.

A Bill "to regulate the practice of medicine and surgery, and other matters connected therewith," was introduced into the Legislative Council by the Vice-President of the Executive Council, and passed by that body. Inadequate as it is, it will be interesting to see if this Bill will find favour with the Assembly, or whether a certain party in that chamber will still prefer that New South Wales should continue to claim, among other distinctions, that of being the paradise of the advertising quack, as it once could that of being the paradise of the working man.

An Inebriates' Bill has been introduced by the Hon. Dr. Creed, and passed in the Upper House. The originator will deserve the best thanks of the community if the powers conferred by this Bill are instrumental in saving from themselves an unfortunate class, whose successful treatment has hitherto baffled our best efforts.

Most of you will not regret the fate of the Midwifery Nurses' Bill, introduced by Dr.

Graham, and passed in the Assembly, but thrown out by the Council—a Bill which was evidently thought by a vast majority of the profession to be against their interests, while not offering any commensurate advantages to the public.

Too great praise cannot be given to Dr. Graham for his Bill to suppress indecent advertisements. At the present time no Act is more urgently needed. All of us must, in the interests of our colony, wish to see a strong measure of this kind become law. It is high time, if the owners of the obscene prints which publish these advertisements, have not sufficient sense of decency to over-ride their greed of gain, that the law should step in and prevent them from poisoning the minds of the young by publishing and sending broadcast such unmentionable filth. What influence for good can any newspaper exert, which, like one published in Sydney this very week, on one side of a page refers to the evil which threatens a country through the falling-off in its birth-rate, and on the other prints the advertisements of persons who openly offer to forward, to married or single women, information as to how this very thing can be brought about, by thwarting the normal processes of Nature, and of the harpies who fraudulently pretend that they can "restore regularity" by drugs? Do we, as a profession, sufficiently recognise the fact, that most of the evils, which form the subject matter of these advertisements, might, perhaps, best be guarded against by timely counsel and advice to children by their parents? If fathers shrink from this duty to their sons it could be deputed to the family doctor, but mothers should be best able to warn their daughters.

The success attending the more complete carrying out of the open-air treatment of consumption can only be referred to incidentally, with regard to the movement for the establishment of Queen Victoria Homes for Consumptives. This movement, it was said last year, had fallen flat. This fact is due, probably, to the following two circumstances. 1. To the strenuous, but somewhat premature and misguided, advocacy of the all-sufficing virtues of the "new tuberculin," in comparison with which the fresh air of the country seemed to be considered as hardly worth bothering about; and (2) to the fact that we have been having just a little too much of a good thing in the matter of public hospitals. But we must admit that we do really require better provision for these unfortunate cases. Most of the suggestions in the early stage of this movement did more

credit to the speakers' kindness of heart than to their ideas of finance; many of them were quite impracticable, and would have involved an expenditure of tens of thousands of pounds. In this drought-stricken country, it is necessary that any Sanatorium for Consumptives should be within easy access of good food supplies. The idea that it can be made, in any way, self-supporting, by utilising on a farm the labours of the inmates, is purely visionary. It would seem that the best, and about the only solution, of this difficult question would be to convert the present Home at Thirlmere into a hospital for the open-air treatment on modern lines, and to reserve its benefits, as far as possible, for those who may still have some chance of recovery. For the advanced and hopeless cases a hospital in or near Sydney is most urgently needed.

Signs are not wanting that there will have to be, at no very distant date, some re-adjustment of our relations with the public generally. I think that all of us feel that these are, at the present time, anything but satisfactory. During past years evidence has not been wanting that there is an ever-growing tendency to encroach more and more on the rights and legitimate remuneration of medical men, and for the public to avail themselves of medical charity to which their circumstances in no way entitle them. From time to time, therefore, it is expedient for the relations between medical men and their various classes of patients to be reviewed. But before we cry out about our grievances (and I fully admit that we have plenty of cause for complaint), let us first go in for a little self-examination, and see if there are no faults and weak places on our side.

I cannot help thinking that, owing to many generations of students being brought up on somewhat stimulating courses of introductory lectures, in which great stress is laid upon the nobility of our calling, we are apt to enter on our work under the impression that we are very superior young persons. Professor Clifford Allbutt probably had some idea of taking the conceit out of us, when he boldly stated in an address delivered more than fifteen years ago, "As to the nobility of your calling, a man may sell fish to the glory of God—that, remember, is as you may please to make it. Essentially speaking, to patch up a man's clay carries to my mind no sense of inherent nobleness as a calling. Skill, knowledge, acuteness, all these it must have; nobility, none necessarily."

That the mere profession "that one is a healer of the sick" is not incompatible with the

grossest and cruellest fraud must be familiar to you all. I do not suppose that there is one medical man in this room, in practice for a twelvemonth, who has not heard a pitiful story from some dupe of the advertising quacks, who, thanks to a supine Government and an accommodating press, flourish in rank profusion in our midst. Even in our own ranks, can it be said that such a thing as extortion is unknown? And the pity of it is, that one case of this kind is apt to be made much of, and the laity are asked from this one case to judge us all. Have we never heard it said, "Oh, we don't like to get Dr. So-and-so into the house for we can never get him out again?" What are we to say of the man who, for weeks together, pays a daily, nay, a twice daily, visit to a slight case of hemiplegia, or who displays a wholly unnecessary interest in a fractured leg after it has been properly and comfortably set? Are such tricks, as "making a case" out of some simple ailment, wholly unknown amongst us? Is the art of self-advertisement by the delivery of popular lectures, or by the circulation, in pamphlet form, of accounts of our wondrous doings, never witnessed in our streets? I should be very sorry to lead any one to believe such things are common, but I have no hesitation in stating that they do occur, to the great detriment of the good name and fair fame of our beloved profession. In quite a different category are those cases which call for the exhibition of bread pills, which, if one practitioner is too scrupulous to prescribe, another will—and quite properly, too. It requires some judgment, and no little tact, to pay one's visit so as, on the one hand, to avoid being blamed for neglect, and on the other, to escape the charge of running up a bill.

A great deal of false sentiment has crept in in connection with our work and its rewards. Do we pretend that any man enters our profession, or that any parent puts his son into it, only because he is seized with an overwhelming desire to benefit his fellow creatures? In the vast majority of cases, the profession of medicine is looked upon as one which offers to those within it as fair a prospect as any other of earning an honest livelihood, and in which the labourer is worthy of his hire. Doubtless, it is a high and noble privilege to be able to minister, without thought of reward, to the relief of suffering and distress in any form, and we should rejoice in our full measure of this privilege; but, as has been suggested, it is not altogether an ignoble thing to provide for the necessities of those who are dependent upon our exertions.

To mak' a happy fireside clime.
To weans and wife,
That's the true pathos and sublime
O' human life.

Are words which will commend themselves to some of you, if only for the nationality of their author.

Does not the fact that our work is essentially a business, or means of livelihood, seem to be forgotten by some amongst us, who, perhaps, come to think that they work only for the honour and glory of the thing, and not for hire, like the common variety of doctor, owing to the fact that their patients, through fear of wounding their delicate sensibilities in this matter, are accustomed to wrap their fees up carefully in paper lest they should be defiled with the beastly money? However, the laity, or those of them who have been fortunate enough to escape from making the discovery for themselves, have recently had opportunities of learning that a "great consultant" can be as keen about his fees as the worst of us. Of Sir William Jenner, to his undying honour, this could never be said. So, having cleared the air a little, we can take a better view of our position.

THE FRIENDLY SOCIETIES.

It is futile to shut our eyes to the fact that our work and its pay are affected by the same laws that govern trade. The more there are who are anxious to supply a given commodity the greater the competition between them, with the result of lowering the price of the commodity. The doctor's bill, disguise its name as we may, like we do the taste of our nauseous drugs, is a heavy item in many a household. Is it to be wondered at if people seek to make it as small as possible; and that, heedless of the fact that the quality of the service they require may vary, they buy in the cheapest market? They are further urged to this by the fact that, oftentimes, it is the bread-winner who is incapacitated by illness, and their income ceases. To meet this class of patient, the system of obtaining professional services by means of clubs and friendly societies has been evolved. The principle of these societies is admirable. It is an advantage to members to be able to provide against sickness by a kind of insurance, which enables them, when laid aside by illness, to obtain competent medical attendance at a reasonable rate; and it is an advantage to members of our profession to hold these appointments, especially during their early years of practice, and thus to secure a certain income. But, unfortunately, grave abuses have crept into this system. Privileges which were

intended, and justly intended, only for persons with small incomes, have been claimed by others who have no right to them. Abundant evidence of this can be found in the report of the Intercolonial Medical Conference, summoned by the Medical Defence Association of Victoria, to consider the relations between the medical profession and friendly societies. This was held in Melbourne in November last. The Medical Defence Association of Victoria is to be highly complimented for their action in this matter, and it is to be hoped that much good will come from it. Medical men are a most reasonable and fair-minded class—their very education and daily work trains them to look at things from all points of view, and they are unanimous in feeling that they are not being fairly dealt with by the Friendly Societies. There could be no better way of settling their differences than by a meeting in conference of representatives of the medical profession and the Friendly Societies in each colony. A free and courteous interchange of views between the two sides should lead to mutual enlightenment and advantage; and it might be shewn, from our point of view, how impossible it is for a medical man to give the time and skill necessary for the diagnosis and treatment of many cases of illness at the present rates of remuneration. Can we wonder if, after a time, seeing the little value placed upon his services, a doctor ceases to give his patients of the best that is in him, and, instead of searching for the cause of certain symptoms, he descends to treating symptoms, and trusts to luck, heedless, say in a case of vomiting, whether the disease may be in the brain, bowels, stomach or kidneys. It may be said that he is wrong. Perhaps he is; but I would plead, on his behalf, that his very environment leads to a deterioration of his higher nature, and then—*facilis est descensus averni*.

Some months ago, a correspondent of one of the morning papers, who discourses airily on all subjects under the sun, exercised his pretty wit at the expense of the club doctor. This writer certainly seems an advocate for cheap physic, and prefers to take it, as he says, in the form of Epsom salts at the cost of a few pence, rather than pay the same number of shillings for it under the name of mag. sulph. With a want of perspicuity, which one does not expect to find in such a versatile writer, he does not recognise the fact that what he pays for is the *knowledge* that Epsom salts is the kind of stuff that best suits a person like him. The other day, at the Jenolan Caves, I heard a man say that it should never be given to anything but a

horse. He, triumphantly, asks "why should any man pay more than will obtain the thing wanted?—that no one grumbles if a doctor takes a tram instead of using a cab, for he is quite within his rights." Of course he is; but he would not be, if he takes a cab but wants to pay only a tram fare. And, I take it, this is the position of the patients of the club doctor. They expect the best medical skill, attention and care but want to pay the doctor at a rate at which it is impossible for him to give such service. In this connection, I am reminded of the wife of a medical man I knew in London. A relative of hers had consulted Sir Andrew Clark, who prescribed ten grains of Dover's powder. She was talking to me about it, and seemed to regard it as most *infra dig.* for such a distinguished physician to prescribe only such a common, well-known, every-day drug, and exclaimed, with a blush of pride, "Why, my husband could have done that!" "Of course, he could," I said—and added to myself, "if he only knew enough." It is just this little trifle of knowing what to do, and how to do it, for which the laity should realise that they have to pay. Ask our ophthalmic friends about their cataracts, if such things are now met with outside our so-called hospitals. Why, the operation is done, "in a moment, in the twinkling of an eye," and bang! go fifty guineas. But the surgeon does not learn his trade in a day.

HOSPITAL ABUSE.

It is simply hopeless in the course of a fragmentary address like this to adequately discuss this ever-increasing evil. The term is best explained by the following extract, which appeared in the *British Medical Journal*, from a protest against the abuse of medical charity, which was published in the *Bradford Observer*, about this time last year, by the Bradford Medico-Ethical Society:—

"It is not to be supposed that the familiar term, 'Hospital Abuse,' implies that the managers, individually or collectively, are responsible for any dishonourable or even questionable proceedings. The abuses complained of (and in general with too much truth) consist in the almost unlimited extension of medical charitable relief to anyone and everyone who chooses to ask for it, regardless of his ability to pay, or of the question whether his ailment is so serious as to need charitable attendance at a hospital at all, and, further, in the fact that the ungoverned and unlimited distribution of medical charity is held to justify boards of governors in making unlimited and unceasing demands for

more money to expend in the same way. Within these conditions are embraced, we believe, all the ordinary 'hospital abuses'—and they are many.

"Year by year the boards report that the good work of the hospitals is extending, and is being more highly appreciated—because so many more thousands have accepted charity in its wards. Year by year they repeat this as their justification for their past management, and as an irresistible claim for larger subscriptions for the future. 'We have given medical charity to 15,000 persons at a cost of £7,000,' say one board. 'Give us £10,000, and we will soon pile up 3,000 or 4,000 more recipients!'"

Could any one more accurately describe the condition of things as they exist in this city to-day?

Excellent as it is, within proper limits, is not this hospital business being a little over-done? There are hospitals in nearly all our suburbs, as well as in the city, there are unceasing demands upon the charitable public for money towards carrying on the work in connection with them on the plea that they are doing so much good and are so highly appreciated. We can all appreciate the blessings and good things of this life, and our appreciation is not always less marked when they can be got for nothing. These hospitals could not exist were it not for the honorary services of medical men, and there is too great a tendency to make too free use of these services. Hear what Mr. Joseph Bell, of Edinburgh, who must be known to many in this room personally, and to most of us by repute, says in his introductory remarks, delivered at the opening of the Section of Diseases of Children, at the annual meeting of the British Medical Association in Edinburgh last July:—

"May I be pardoned if I express to the Section an opinion that there is a risk of over-doing what may be called the driving of sick and hurt children into hospital to the exclusion of home treatment.

"This may be considered a foolish idea, but the general practitioner all over the country is gradually beginning to see that hospitals are being used by patients who have no right whatever to public charity, to the grave detriment of the independence of the middle class, who are already too well disposed to get all they can for nothing, and also impoverishing the practitioner. The very poor, who have dirty homes, and who starve their children, may have a sort of reason when they bring their children to light, air, and food, but the great middle class should be reminded of their responsibilities.

"There is no reason whatever why a large number of operations which crowd the wards should not be done at home. Mastoid antrum cases, tuberculous glands and joints, radical cures of hernia, phimosis and the like, why should hospital surgeons slave at doing those for nothing for patients whose relations are often much richer than the surgeon? Oh, the answer is, you cannot keep the wound aseptic. Well, if you cannot keep a child aseptic in a decent home you are not much worth, and till the State pays the doctor, or public charity supports him as well, as the palatial hospital, some patients should still be left in their homes."

Take for instance here, the casualty department of the Sydney Hospital. Is it generally known that this has been under the patronage and been honoured by the presence of a Government House aide-de-camp and the chief of a Government Department? Not, mind you, as cases of serious emergency, but such as any doctor is capable of treating. Many, besides myself, must have seen persons drive up in cabs, and after paying their fare stroll on to the casualty room for treatment. No effort whatever is made to stop this. Can it be imagined that the people, for whom sulkies and buggies wait outside, are all so poor that they cannot afford to pay, say 1s. a week to belong to a club? I have felt it my duty to bring under the notice of a director of this hospital the case of a person of means, staying at a leading hotel, who did not hesitate to come daily to the hospital to have a wound dressed until I sent him about his business; but this disagreeable duty should not be left for an honorary officer to perform. But why multiply instances? We all know too well that this abuse exists here in these colonies to an almost incredible extent, and that it has reached a stage in which we should be justified in saying it shall not continue.

There are only two alternatives. Either our directors must devise some alteration in the methods of admission to our hospitals, or the profession must re-consider the question of honorary service.

It is the duty of directors of hospitals to make, at least, some endeavour to prevent abuses; and I do not think that, in this respect, they have done all that they ought to have done. Directors are only human. They, as a rule, are business men whose time is valuable, and, their office being an unremunerative and rather thankless one, it is not to be wondered at if a majority give themselves as little trouble as possible; if complaints are made, they like

to smooth them over, either in the hope that they will not occur again, or from the fear that if they make a fuss, the public won't like it and subscriptions will fall off. Indeed, so obsequious and deferential do they seem to this same precious public, that some of the latter are beginning to quite lose sight of their real position, and give the members of the hospital staffs the impression that they consider they are conferring a favour on the hospital by going there at all and condescending to be treated. Do the directors of the various hospitals not see, that since the unlimited extension of this damnable pay system, they are somewhat in the position of rival shopkeepers, all anxious to attract as many customers as possible to their own particular "mammoth emporium," where the best and most sought-for goods, as represented by the services of their honorary staff, cost the directors nothing, since they are obtained under false pretences? And, in addition to this, they ask for and continue to get more and more support from the charitable public and the Government, to enable them to draw more and more patients from outside agencies, such as the Friendly Societies, private hospitals, and medical practitioners, who have to work "on their own," as the saying is. Moreover, with exceeding self-complacency they issue annual reports, which, whatever may be thought of them by the charitable public, are pretty generally regarded by our profession as, to put it mildly, disingenuous. The directors have to run the hospital, and wish to run it with as little friction as possible, even if the needful lubricant requires for its "basis" a mass of injustice to the medical profession.

Much as we may deplore the events in connection with the Adelaide Hospital, and without expressing any opinion as to how far the conditions demanded are there fulfilled, one cannot but think, that in these colonies, the principle of having a few well-paid capable medical and surgical officers to do all the chief work, with juniors under them, who in time could succeed to their positions, would be a proper solution of the difficulty. But let us hope it will not have to come to this.

At the annual meetings of hospitals, when the chairman of directors has finished calling attention to what they so dearly love to call "their good work," he generally follows on with a nice little compliment to the honorary staff, for all the time and skill they have devoted so ungrudgingly to the service of the sick poor. I do not often attend these functions, but am curious to know, if during the delivery of this very agreeable speech, a chairman has

ever been detected in the act of what, I believe, is described as "winking the other eye." I am sure he would be, if he has any sense of humour. Do we, as a body, rise superior to the "bread upon the waters" principle, of which we have lately heard a good deal? We all have plenty of opportunities of doing good in a quiet way, and to our credit, as a profession, we respond nobly to all the demands made upon us by the deserving poor, whether in public or private. We do so much for nothing that we need not claim credit for what we do not deserve. Do the honorary staffs really feel that they require this fulsome eulogy? It is mere affectation to pretend that it is not considered, on the whole, an advantage to hold these offices, and that the hard, exacting, and anxious work is not compensated for, as a rule, by the gain in professional knowledge and experience, and the enhancement in value of one's services that such a position brings. Why is it that, whenever one of these positions becomes vacant, there is such competition to get it? Because they are looked upon as hall-marks of competency. Where hospital relief is afforded gratuitously to the deserving poor, and the doctor gives his services under these conditions, then the arrangement is a fair one to both sides. But beyond this the doctor should not be expected to go. When, what should be hospitals, become vast State-aided institutions into which all classes of the community, no matter what their pecuniary position, find no difficulty in gaining an entrance, such a contention cannot be upheld.

There is just the same old human nature in us doctors as there is in our directors; and, consequently, in spite of the abuses which have crept in, I am prepared to find, among the holders of these honorary appointments, considerable opposition to any suggestion that they should ever be given up, because, with all their abuses, the offices are still advantageous ones to hold. Their positions are assured, and, heedless of their less fortunate brothers, they are too apt to cry, "Every one for himself—*occupet extremum scabies*—the devil take the hindmost." And our directors are shrewd enough to know this.

Here might be impressed upon the younger members of our Branch the fact, that in this question of hospital abuse, they had better not accustom themselves to look altogether, as they may do in other instances, to the senior members to help them; they must work out their own salvation; for, as just hinted, the senior men are apt to be like those comfortably seated on the top of Bellamy's coach, and to

have little sympathy with the poor fellows trying to climb up behind.

The system of having private wards for paying patients in a hospital which appeals to the public for subscriptions is one which no words of mine can sufficiently condemn. In justice to the Prince Alfred Hospital, it must be said that, at the time this was built, it met a much-needed want; but that time has gone by, and Sydney now possesses several thoroughly well-equipped private hospitals, which are maintained independently of any outside support, and it is most unfair that they should have to compete with institutions which pose as charities, yet are carried out in this respect as business concerns. And the worst of it is, there is reason to believe that this system is in process of extension. Here, as in so many cases in which we are inclined to make a grievance, can we say that those members of our own profession are in no way to blame, who acquiesce in this system because it pays them to do so? Directors might do something towards informing the public that there are such places as private hospitals, instead of entering into unfair competition with them.

It may be asked, "Whom then do you consider fit subjects for hospital relief?" I would answer: (1). Those who are in destitute circumstances. "To make certain that patients are fit and proper persons for gratuitous relief it is absolutely necessary, in the majority of instances, for an inquiry officer to visit the homes of the patients." (2). Those who, while not destitute, are not able to pay ordinary fees, but have shewn their willingness to make provision against ordinary ailments by belonging to some club or benefit society. In the event of such persons being overtaken by some extraordinary calamity, say, the husband breaking his leg badly, or the wife suffering from an ovarian tumour, then the hospitals should receive such persons and treat them free, and not extort from them five or ten shillings a week, which, probably, has to be got, owing to the temporary incapacity of the wage-earner, by selling portions of their household furniture. "Hospitals, so long as they appeal to the public for support, should be entirely free." "Patients ought to make provision for their ordinary medical needs, and this can be done in an honest manner by a proper system of medical providence." These are two statements with which we must all agree.

"Why go to the expense of belonging to a club when I can go to the hospital and get all I want for nothing?" is the answer given to any suggestion about joining a society of the

kind. Surely something might be done in this direction, by way of pointing out to people their obligations, instead of welcoming them all indiscriminately. By all means, let us give, freely and ungrudgingly, to the poor and really deserving, the best surgical and medical treatment we can, but let the mean rich and well-to-do pay for such services as they should for everything else. But, may be asked, what about the man with a family to keep, and who has £300 or £400 a year, who, you say, is too well off to make use of a public hospital, but whose wife requires an operation which would run him into £100 or more in a private hospital? It is said to be very difficult to legislate so as to provide for a few special cases, and these come under this category. If the larger abuses of which we complain are remedied there will be no difficulty about these cases, and surgeons will be only too glad to take them into the public hospitals, or to operate on them in private, without fee, so long as they pay the private hospital charges.

Those belonging to the well-to-do classes should not come to the public hospitals at all. In connection with this class I refer you to the excellent remarks of Dr. Clubbe, in his address last year. I might, perhaps, add that less than a week ago a person, described as of independent means, who met with a serious accident, was brought all the way from Randwick to the Sydney Hospital, instead of being taken to his home, as he should have been.

The *British Medical Journal* has had occasion to call attention to what it describes as "the the grave danger of rendering a hospital dependent for its stability on the contributions of working men's clubs, who will insist on the governors adopting their decision as to the suitability of applicants, under the threat of withdrawing their subscriptions." That a similar danger threatens us here in Sydney was evidenced by the preposterous demand of the directorate of the Hospital Saturday movement, in connection with their Industrial Fund — by which persons subscribing a few shillings a year could turn the public hospitals into medical clubs.

By way of a peace offering, I would, on behalf of our Association, respectfully tender to the directors of the Prince Alfred and Sydney Hospitals our high appreciation of, and most grateful thanks for, the stand they took in this matter. It cannot be too strongly insisted upon that it is "as much for lay as for medical intelligence and effort to provide a remedy against these evils." We already have amongst us a small section who will not dig, let us see

that we do not encourage a much larger one who will count it no shame to beg. Desperate diseases need desperate remedies, and it is only by placing before the charitable public the extent of hospital abuse that we can hope for a remedy; we must welcome, therefore, the outspoken article in the January number of our *Gazette*.

I shall close this part of my address by quoting some figures (for which I am indebted to the courtesy of the superintendents and secretaries of the hospitals named), giving the numbers of individual patients, not the numbers of their attendances please note, who have received during 1898 charitable treatment at the four chief hospitals in this city—the Sydney, Prince Alfred, St. Vincent's and the Children's Hospital:—

Hospital.	In-Patients.	Out-Patients.	Casualties.	Total.
Sydney	3,618	14,890	6,601	25,109
Prince Alfred	3,472	7,712	4,781	15,965
St. Vincent's	1,665	5,401	2,213	9,309
Sick Children's	557	4,082	—	4,639
Grand total	...	...	...	55,022

Over 55,000 persons! and this number is exclusive of those treated at Little Bay, where, however, the medical officers are not honorary ones, and those treated at the numerous suburban hospitals. Go home and think on it, gentlemen, and if you come to the conclusion that these figures represent the true condition of this colony, and are an index to the charitable needs of its people, then, but not till then, let us have Federation at any price.

OUR PRIVATE PATIENTS.

Having discussed some of the relations between our profession and the friendly societies and the hospitals, a few words may be said as to those concerning our private patients. These are undergoing change. Even that bane of the modern doctor's life, the telephone, has made some difference. Our patients now ask us for our advice by telephone, and I am not quite sure that they always expect to pay for it.

First, let me say that I do not think it is, even now, sufficiently recognised by us, that we have no proprietary rights in our patient. He is as free as the air to go where he listeth; whether he uses his liberty wisely or not is his business. The time has gone by when the family doctor was consulted for everything; and I am not sure that patients often do not lose more than they gain by rushing off on their own account to consult the last new comer, or the specialist, whom *they* think is the man for their particular ailment—they certainly lose

that personal interest in themselves and their troubles, which the old family doctor, "who knew all their constitutions," used to take. It would, perhaps, be better for them if they first asked their usual adviser to guide them in their choice. For this altered state of things, I fear that we ourselves are much to blame. Some men get offended at the mere suggestion of a consultation, and this has led patients, who were, perhaps, quite reasonably, not fully satisfied with the progress they were making, going off quietly and getting a second opinion. We should be more ready to meet in consultation; an unwillingness on the part of any medical man to consult with another reputable practitioner betrays that man's own want of faith in his diagnosis—his fear that he may be found out to be wrong. I have known of, at least, one man, who seemed to take the mere suggestion of a consultation as a want of confidence in him on the part of his patient, and who would threaten to throw up the case if any one else was called in. A wrong, unsympathetic and heartless position to take up. All these things could be avoided, to their mutual advantage, by straightforward, upright conduct, on the part of both practitioner and patient. That there is this necessity on our part may be gathered from the fact that such addresses as the "Harveian Oration," by Sir Dyce Duckworth, "On the Influence of Character and Right Judgment in Medicine," and that by Dr. Charles J. Cullingworth, "On the Importance of Personal Character in the profession of Medicine," were delivered during the past year.

No doubt, we have all felt at times, a desire to be able to entertain towards our patients that silence which is said to clothe a certain kind of men in an opinion of wisdom; and, when much cross-examined by them, have wished we possessed that distinguishing feature of Lord Acton's conversation, which a recent writer describes "as an air of sphinx-like mystery, which suggests that he knows a great deal more than he is willing to impart." As regards talking about our cases outside, doctors, as well as diplomats, might take to heart Lord Salisbury's remarks about the virtues of silence.

Our patients, nowadays, read the magazines in which men of distinction in the profession are pleased to serve up their views on matters more or less medical, for the edification of their readers and the glorification and advertisement of themselves. Thus, our educated patients are apt to ask us puzzling questions, and so it comes about, that we hear from them of the extraordinary things they are said to be suffering from, after some doctor, who is not skilled in

the art of fence, has been forced into an attempted explanation of some condition which, in his inmost soul, he is not quite sure about himself. Patients want to know what the nature of their complaint is, and expect you "to give a name to it," as if this was always as easy as calling for a drink; they will not be denied, and if they are, they will, probably, go elsewhere to an adviser, possibly less conscientious and skilled, but with more belief and confidence in himself. To be able to inspire confidence is a valuable asset, equally for a doctor as for a building society, a bogus company-promoter, or a bank, but in all of them, it is believed to have been occasionally misplaced. A most excellent lady recently told me that circumstances had led to her having to change her medical adviser; and that the first time she had occasion to consult the new man, she said, "Now, doctor, I want you to tell me what is the matter with me. It is not enough to just write a prescription, I always want to know the name of what it is from which I am suffering." Fortunate is the man under these circumstances when some vague allusion to the liver will suffice. Mr. Treves has most humorously described the various ways in which patients speak of this organ; some that it is "out of order," and others that "it will not act," as though it were a motor car or a cheap watch. It would appear that we have adopted for our own many of the expressions of our patients, which, however obscure they may be to the physiologist—and also to ourselves—seem, like that "blessed word Mesopotamia," to bring balm and comfort for their tormenting ills.

It is not given to many men to reach that position in our profession in which they can venture to say, "I don't know"—yet, I take it, we might often, in effect, say so; it is the most conscientious and satisfactory way to point out to a sensible man the difficulty there may be in his particular case, and that further observation may be necessary before giving a definite opinion. If he wishes for one at once, let him seek it elsewhere—it is his right.

One hears occasional murmurs of dissatisfaction at the goings on of the "specialists," who certainly seem to encroach, more and more every year, on the domain of the general surgeon, whose territory, some wag tells us, is now confined to a few square inches in the neighbourhood of the umbilicus. After all, it is a mere matter of competency in the operator. If a man knows and feels that he can do an operation properly, and without needlessly endangering the life of his patient, why on

earth should he not do it? If a specialist chooses to go clearly outside the work for which only he has qualified himself, and operates to the detriment of his patient, when another man could have benefitted him, that is quite another matter, and we must leave him with his conscience and his God. The same applies to the general surgeon, so we need not take his grumbling very seriously.

In this busy age, with its diversity of occupations, and specialised employments, many new affections, inco-ordinate actions, faulty or bad habits—we can hardly call them diseases—are developed, and observation tells us that we, as a class, are not exempt. We must most of us admit the reality of the affection, which has been described as *cacoethes secandi*. It resembles typhoid in affecting chiefly the young, energetic and vigorous amongst us, and ague in its incidence on new arrivals in our territory. It is apt to blight those whom the affected one touches. As we grow older in the profession, we do not seem so liable to suffer from this complaint, possibly, we may have passed through a mild attack in our early years of practice, and thereafter become immune. Increasing years do not always bring with them increasing faith in the knife as a means of cure. The brilliancy of modern surgery, like the electric light, casts its dark shadows, for all its glories of achievement are followed by a good deal of unnecessary and useless operating. Time was when the success of an operation depended more on the individual skill and dexterity of one man; the same holds true, of course, of many of the advanced operations at the present day, but as Mr. Christopher Heath points out, now nearly everybody considers himself competent to operate, and seeing that not much harm comes, or if it does, the case is not published in the *Australasian Medical Gazette*, there is ceasing to be amongst us, and especially amongst those now entering our ranks, a due sense of the grave responsibility involved in urging and carrying out large surgical operations. Gentlemen, I say this in all sincerity and with no wish to give offence. I do not altogether regret that I am old enough to remember the time when it was considered a serious thing to open up the peritoneal cavity. "I respect the peritoneum but do not fear it," says the pushing and would-be-brilliant surgeon of to-day, and then with a very great deal of self-assurance, but very little provocation, he proceeds to open it and pick out a normal ovary, or anything else he may be pleased to regard as not quite up to the mark. I recall the day when I saw (alas! that I should have to say) the late Marcus Beck, that careful,

able and scientific surgeon and most lovable man, open the peritoneal cavity unintentionally while performing a lumbar colotomy. His kindly face wore a look of the greatest distress, when he was explaining afterwards what he had done, and he ended by saying, "I am afraid I have killed the poor fellow." Beck, who considered, as every one of us ought to do, the safety of his patient his supreme care, stitched the bowel to the wound in the peritoneum, opened the bowel some days after, and the case did well.

It is with respect, more especially to operations for malignant disease, that, as surgeons grow older, they are apt to take a despairing view. It requires, nowadays, a certain amount of moral courage to refuse operation in some of these cases. If A. will not operate, the patient probably goes to B., who does. Yet, I think we should refuse oftener than we do. The best and the only true way to decide, is to place some one near and dear to you in the patient's place, and ask yourself would you urge an operation? Mr. Mitchell Banks, whose words should carry authority, says, "If there is a fair prospect of an apparently complete removal of a cancer with a zone of apparently sound tissue along with it, he had no hesitation in pushing an operation for this purpose to its fullest length. But when severe operations could obviously end only in an incomplete removal of the disease, he thought this was discrediting surgery. He believed that such proceedings prejudiced useful operations in the eyes of the public. The knowledge of such predestined failures deterred many from coming for surgical aid in the early stages of malignant disease, when surgery had almost its only chance of permanent cure."

In this place one cannot but refer to the inaugural address to the Obstetrical Society of Edinburgh, delivered last year by the president, Dr. Halliday Croom, in which occurs this statement: "Looking back over thirty years' experience—from the escharotic treatment, the Chian turpentine epoch, the various amputations, curettings and hysterectomies—I am rather disposed to think that the surgical method of dealing with uterine cancer has done little either to ameliorate suffering or to prolong life, and that once a uterine cancer is recognised, palliative local measures and a happy euthanasia are the best solutions of the difficulty."

But I shall leave this question in the hands of our new president, who has already shewn us that he has views on the subject.

But we should not despair. Because we cannot command success, is that any reason why we

should not continue to do our best to attain it, or at least reach better results from the experience gained through our failures? How much better would be our results if, instead of taking our patient's word that he is suffering from piles, we made a local examination; if, instead of agreeing with a patient who is suffering from hoarseness that "it is just a slight cold," we used the laryngoscope; if, in all cases of bleeding in women of middle age, a local examination was insisted upon; and if, in all cases of doubtful tumour of the breast, an exploratory incision was advised. Briefly, we should endeavour to detect malignant disease early, and operate widely, removing at the same time, when possible, the lymphatics most likely to be involved.

In preparing this annual address, in which the speaker has to place before you old and familiar topics dressed up in new phrases, it is difficult to disguise its family likeness; ideas and expressions which one may have assimilated from former addresses are apt to remain unobtrusively buried under the threshold of one's consciousness, only to come to the surface, in all the seeming freshness of originality, during the process of turning over in one's mind the material gathered for its construction. I ask your pardon if I have sinned unwittingly in this respect. But do not think that I am vain enough to imagine that anything I have said to-night is going to have any more effect than the lamentations of my predecessors; or that, twelve months hence, the conditions to which I have referred will be appreciably better than they are to-day. The mills of the gods grind slowly, and it will take time for the evolution of a juster conception of our mutual duties and obligations.

But I fear many among you are now beginning to think I have said enough, much even that might well have been left unsaid, and that it is time to ring down the curtain on our last year's work. The occasion called for a little plain speaking. It is easier and pleasanter to say smooth things. But a man would not be worthy of the honour of this position if, through fear of some falling off in practice, or of what people outside might think, he failed to voice your grievances and to call attention to what he honestly believes to be wrong. It has been my endeavour to "nothing extenuate nor aught set down in malice," but to give you a fair presentment of our position in its relations to some of the various conditions under which we work. Like some of our patients, we are apt to be most sorry for ourselves when our

troubles are brought upon us through the unruly and ungoverned actions of members of our own body. The grievances may not be altogether on our side, but none of us will deny that we have more than our share of them. So before going forth to battle with the clubs, or the evils of hospital abuse, let us endeavour to see that we for our part are clothed in the whole armour of righteousness. I believe that most of the wrongs of which we complain are capable of being righted, by educating people to see the unreasonableness of their actions—they know not what they do, and may honestly, if thoughtlessly, believe that they are doing only what is fair and just. I like to believe in the vast preponderance of good over evil in my fellow man, and that, in spite of all the pessimists and dyspeptics, he was never better than he is to-day. As a fine animal he has, probably, reached his best—his development henceforth is along the moral plane. The higher we rise the broader becomes our view, and we see, through a purer air, things undreamt of below. Our blood corpuscles to-day are no larger than they were before we learnt to look at them through the microscope. So, too, with our faults, which, only seem to loom larger because, with the growth of our moral feelings, we view them through different media. All this should give us hope, and make us take heart for the time that is to come. It is the evidence of things not seen, which we are yet to see—

"The dove of peace and promise to our ark;
The evening beam that smiles the clouds away,
And tints to-morrow with prophetic ray."

MEDICAL VACANCY.

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WM. H. RAWLINGS,
Secretary.

Office—
Irvinebank, N.Q.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 28th April, at 8.15 p.m.

Business:—General.

G. T. HANKINS, Hon. Secretary.

PRESIDENTIAL ADDRESS.

SOME OF THE FEATURES AND ADVANTAGES OF MEDICAL SOCIETIES.

DELIVERED BEFORE THE NEWCASTLE MEDICAL SOCIETY, 9TH MARCH, 1899.

BY JOSEPH L. BEESTON, L.K.Q.C.P.I., ETC.,
NEWCASTLE.

IN accordance with the custom usual on occasions such as this, I have the honor, now that my occupancy of the Presidential chair ceases, to give the usual retiring address.

At this stage, I am confronted with the awe-inspiring dilemma, "What the address is to be about." While considering this most important point, it struck me that I might carry out a custom which I observed in another gathering of festive spirits, that if a man could not do anything in the way of singing, recitation, or otherwise to amuse the company, he was compelled to propose his own health.

As my case appears to be an analogous one, I shall have to do the same in a slightly different manner, by endeavouring to point out some of the beneficial uses of Medical Societies. In doing so, it may not be out of place to trace out the course of our own little Society; which, though small, ranks second in seniority over any in the colony.

In the year 1883, the practitioners in the district of Newcastle, being of a congenial and gregarious temperament, met and decided to form a Society where they could meet and discuss their cases, and also blend a little social enjoyment, wherewith they could make their existence on this planet, a little more cheerful than had hitherto been the case.

We met regularly for four or five years, then through removals of some of the members, and the remainder lacking energy, the Society lapsed, or rather went into a rather lengthy recess. During this time, however, life had not become quite extinct, for in 1889, a little stimulus was applied, the heart once more became perceptible until animation became quite restored, and we now go along, I think, with renewed vigour and pleasure, until we have every reason to congratulate ourselves on the success of our Society, and the stimulus it has given each of us to keep up with the progress of the time.

Having thus, as it were, metaphorically patted ourselves on the back, it would perhaps be fitting at this stage to point out some of the effects of Medical Societies.

In the first place, a paper on any subject, entails a certain amount of compulsory reading. One feels that before placing his views before

an assembly of his confreres, he should make himself perfectly conversant with his subject; as there is always amongst us the enthusiast and seeker after knowledge who rises respectfully and deferentially, as a rule, towards the end of the debate to propound a theory or put a question. To be prepared for this very useful member, one is compelled to forego the indiscriminate, and perhaps cursory perusal of our books, which most of us indulge in; and make up facts and statistics which at other times one looks at with a superciliousness, which is as praiseworthy as it is prevalent.

None of this does any harm, and in fact I am afraid we don't estimate this enforced wish at its proper value; that is, if one can judge by the amount of persuasive efforts required by the Honorary Secretary to bring members up to the scratch, and read a paper. Though in this connection I must say a word in praise of our own members. With one or two exceptions, all contribute their share towards the literary efforts required to keep the meetings going. In the most inveterate case, all due allowance can easily be made for that "tired feeling," which, by the way, is supposed to be arrogated by, and a distinctive feature of, the pure Australian. In the case under notice, however, this appears to be of Celtic origin.

Having in a mild way remonstrated with our erring friends, I will go on to point out some more of the advantages attached to meeting with one another. One of the great attributes these societies tend to develop is the power of oratory. Who is there of us who did not at one time rise to address the meeting with all his facts and data duly marshalled and in proper order, ready to make out a really good case, but the moment he rose to his feet his thoughts moved with a marvellous celerity through the vault of his cranium. Now I do not for one moment wish to pose as an orator—far from me be such unworthy motive!—but I will say that I am in a much better frame of mind when rising to address the most "potent, grave and reverend signors" than I was a few years ago. This I believe to be due to the practice of entering into the discussion at our meetings. There are some of our members who are really adepts at debate, and these assist greatly in our instruction and entertainment. It is only by constant practice that one can attain that degree of excellence which makes facility of expression an advantage.

The benefits that we members of the profession in Newcastle have experienced by meeting together cannot be too highly estimated.

Previous to the formation of the Newcastle Medical Society we were merely scattered units,

each acting in his own sphere, and taken up with his own individual responsibility. Being brought together in friendly conclave, each found that his neighbour was not such a bad fellow as he had hitherto regarded him. Little differences were smoothed over, and friendship once more pledged over the social cup of coffee. The outcome, in some measure, is the satisfactory state of our Club practice, which, I think, is on a fair and equitable footing both to practitioner and patient, and stands in favourable comparison to that which obtains in other parts of the colony. The Club members are more satisfied under the present system, and a more friendly feeling exists all round. The patients thereby gain the benefit. If the practitioner attending a case does so under the impression that his services are distasteful to the patient or his friends, owing to the patient being compelled to subscribe to this particular doctor, then it is too much to expect of human nature that the practitioner in question will enter into the case with that energy and will which he would under other and more agreeable circumstances.

Although the question of Medical Ethics is by the rules of the Society debarred from discussion, yet the little friendly conferences indulged in after the meetings are over settle many of the little points about which we, as a profession, are proverbially sensitive. And just here, if I might be permitted to adopt a parental and advisory tone, I would suggest that many a misunderstanding would be done away with, or cease to exist, if the party feeling he had a grievance went to the other and talked matters over. It may end in open enmity. In that case we know where we are; but in nine cases out of ten the matter will be arranged to the mutual satisfaction and probably the lasting friendship of both parties.

My old and respected teacher, Dr. James Little, often gave the following sage advice:—"Gentlemen! there are three things a patient will tell you which you should disbelieve: 1st, whether he drinks; 2nd, whether he has had syphilis; and 3rd, what the last doctor said about him."

In regard to the last, it would be well if all of us kept it in mind. A sick man, or woman for the matter of that, comes to us with an ailment for which his or her medical attendant has given an unpalatable opinion; from which opinion either hopes that we may differ.

They may, or may not tell us the whole of the facts, they may keep back some salient points, for instance, in their personal or family history which would assist us in forming a

correct conclusion. The result is that we perhaps give an opinion contrary to that which they have already obtained.

One of the most prevalent propensities of the human race is to "provoke a row," they thereupon return to their own attendant, with the probable statement, that they have been to Dr. So-and-So, and that "he does not agree with you at all," most probably the statement is further embellished and enlarged upon; and that the attendant probably thinks his colleague has not acted straight with him. It is in such a case as this, gentlemen, that I think a little talk does a wonderful amount of good. If the matter be allowed to lie, some other little thing (probably fancied) crops up, and there two practitioners are at one another's throats, whereas a few minutes conversation puts a totally different complexion on the case.

It perhaps requires a little strength of mind, or shall I call it moral courage, to go and beard a man in his own den, and it is for such occasion as I have mentioned that we had a custom which I am sorry to say has fallen into desuetude. For many years it was customary for us to meet annually and have a little dinner together. These gatherings, I believe to have been productive of incalculable good, but we seem to have dropped them by mutual consent. I should, personally, like very much to see them revived, for I am firmly convinced that they were a power which drew us firmly together, assisted us to find out the good points of one another, and cemented firm friendship. The pleasant gatherings we held in years past are, I am sure, remembered by all of us with pleasure, and I do not suppose that there will be one dissentient amongst us if it is proposed to renew our former custom, and hold our annual dinner. As an outcome of the meetings of smaller Societies, we have those gatherings where the smaller ones have amalgamated and formed Congresses. In these International reunions we have assembled together the greatest intellects in the medical world, and medical questions of every kind brought up and discussed.

Coming to our own immediate and smaller sphere, we have the Intercolonial Congresses, which, being held triennially, are a means of congregating most of the heads of the profession together, and thrashing out problems which are of interest to us at this side of the world. As an instance of the amount of benefit these Congresses are, I may quote the discussion on hydatids in one of the late meetings. This was sent to all parts of the world, and the results are taken as a criterion for treatment

now in most of the works treating of that disease. It is only right that it should be so, seeing that the profession in Australia have so many opportunities of making researches into this department of medical science. As an evolution of Medical Societies we have here the N.S.W. Medical Union, of which every member of the Medical profession in the colony should be numbered. None of us know how soon we may be the victim of the enterprising speculator or blackmailer, who, with the stiff elbow joint, seeks to reduce the ankylosis by receiving substantial damages at the hands of a sympathising jury. Often enough it is of little moment whether there be any malpractice or neglect on the part of the practitioner, or what evidence to the contrary is given by reputable and admittedly capable witnesses, still when the case goes to trial the Medical practitioner invariably loses. Even if he gains the case by obtaining a verdict the probability is that the person bringing the action is of no account, which leaves the practitioner, after spending weeks of anxiety in endeavouring to uphold his reputation, to pay his own costs. The harm does not remain here either. The stigma of having an action brought against one remains, as there is always a certain section of the public to willingly believe that the practitioner is entirely in the wrong, and that if everyone had their rights he ought to be in gaol.

Now, although the number of actions brought against medical men of late years has not been large, I believe it to be due simply and solely to the moral effect of the Medical Union.

If a case be threatened and the practitioner be a member, his proper course is to send a full statement down to the Council of the Medical Union. They will then go into the case fully, and advise as to the best course to be pursued.

If it is a clear case of blackmail, then the practitioner has the advantage of obtaining not only the best medical or surgical advice, but also the best legal opinion in the matter.

Undoubtedly many of these trivial and vexatious actions are now abandoned, owing to the establishment of the Medical Union.

There is another offshoot of medical societies which exists in England, and which I should very much like to see established in this colony. I allude to the Medical Sickness, Annuity and Life Assurance Fund, which provide for weekly pay during incapacity, either for sickness or accident.

In some of the Accident Assurance Offices doing business here, the risk, in addition to

accident, is taken of a few of the contagious diseases. But the risks of these as against ordinary illness is small, and it would facilitate the recovery of many a medical man were he assured that those near and dear to him would be provided for during a sickness. Now-a-days there is not the opportunity of making money which obtained in former years, and there are many medical men doing little more than making expenses. Therefore when sickness overtakes them, all supplies are stopped immediately, and, in addition to his bodily ailment, he has superadded mental worry from financial reasons.

I saw quoted the other day that the mortality table gave the risks on medical men's lives as the highest in the category—some points above miners. We therefore should take every possible means in our power to provide against risks, and were it possible to start a society on the lines I have mentioned I feel sure that numbers of men would join it. The expenses attached to the administration of such a fund would not be excessive were it connected with and administered by the Council of the Medical Union. I think the one management would be quite capable of working the two branches, and it would be an additional means of consolidating the profession as a whole.

In conclusion, gentlemen, I have to thank you for the patience with which you have listened to this address, and also for the courtesy extended towards me during my occupancy of the chair. The welfare of the Newcastle Medical Society has always been a hobby of mine, and I hope that I have been able to put forward a few things in this address which will tend to further its interests.

"WIDAL'S Reaction as a Test for Typhoid Fever," by Sydney Jamieson, M.B., a paper which was published in the *Australasian Medical Gazette*, September 20th, 1898, is noticed in the *British Medical Journal*, February 18th, 1899.

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WANTED, copies of *Lancet*, March 6, 1897, and Aug. 27, 1898.—*Australasian Medical Gazette* Office, 131 Bathurst-street, Sydney.

COCAINOMANIA.

BY CLARENCE G. S. GODFREY, M.R.C.S. ENG.,
ETC., MEDICAL OFFICER YARRA BEND
ASYLUM, VICTORIA.

A PAPER READ AT THE ANNUAL MEETING OF THE
MEDICAL STAFFS OF VICTORIAN HOSPITALS FOR
INSANE.

THE consequences of the abuse of drugs having been met with in Hospitals for Insane more frequently of recent years than formerly, it may be of interest to draw attention to the special neuroses which follow the habitual use of cocain.

In this paper I have endeavoured to recognise two separate series of nervous and mental symptoms—the insanity produced by the prolonged action of the drug on the central nervous system; and the general physical and mental disturbances which follow its withdrawal.

It is not until cocain and other narcotics have produced the train of symptoms that indicate irresponsibility that such cases come under our observation as alienists. That there is an inebriate diathesis similar to the insane diathesis there seems little doubt. According to several observers there is a similar nervous exaltation, or derangement, with the same uncontrollability of reason, will-power, and actions. So many cases are recorded where the narcotist is born of intemperate or neurotic parents that heredity also may be considered as playing an important part in the causation of narcomania in its various forms.

Most of the cases of cocainomania I have met with have resulted from the morphine and cocain habits combined, the morphine being ultimately left off and cocain alone continued. In both of these conditions (morphinomania and cocainomania) the neurosis seems to be functional, differing in this respect from that in alcoholic cases, to which it is in other respects closely allied.

The records of the *post mortem* examination of morphinomaniacs seem to show that there are no pathological changes which can be fairly said to be caused by the direct action of the drug on the tissues; but in the few cases of cocainomania that have been examined *post mortem*, and according to numerous experiments on animals, cocain appears to cause a distinct action on the leucocytes, which become spherical. There is also hyperæmia of the central nervous system, while the rest of the organs are anæmic; albuminoid degeneration of the ganglionic cells of the medulla oblongata and spinal

cord, also of the nerve cells of the cardiac ganglia, and a similar degeneration and atrophy of liver cells and muscular fibres of the heart and of the arterial coats. The small vessels also have been found contracted and containing emboli.

The class of patients who suffer from this form of narcomania are usually well-to-do people, and in Europe no less than 30 per cent. of all cases are medical men.

The cocain habit is in most cases commenced by the patient taking it as a substitute to break off the morphia habit, and it is remarkable that so long as the cocain is indulged in, there is no craving for morphine (morphismus), and there is no return to the latter drug until the patient becomes alarmed at the result in his physical condition, or at some of the acts he perpetrates while under its effect. Then he frequently returns to the morphia habit in the attempt to leave off its substitute. In such cases (a return to morphine after cocainism) I have observed that the amount of morphia is greatly increased. Another very common cause of the cocain habit is the spraying of the nasal mucous membrane for coryza, etc.

Cocain inebriety is far more seductive and rapid in its effects in breaking down the mental powers than is the case with morphine, and it is the more insidious, from the fact that at first and for some little time the cocainist has none of those unpleasant after-effects, such as dry tongue, morning headache and bad taste in the mouth, as is the case from the commencement with morphinists. In about four to six weeks the habit may be said to be established, and there gradually ensues this craving for the drug, with the intense depression, anorexia, insomnia, and nervous tremors, until the dose is repeated and ultimately insanity ensues. When the habit is commenced, there is increased mental and bodily vigour—with small hypodermic doses—and there is practically no excitement, but soon the system becomes gradually tolerant, and there results increasing insomnia, with a persistent craving for the drug which overcomes all moral and social laws. As the habit becomes established there is a period of extravagant and pleasurable visions. Next there is exaggeration of the reflexes, persistent erections during coitus, and spasmodic action of the muscles in defæcation and urination (Lamphear). Frequently during this period the patient sees a peculiar spectrum round a light, consisting of concentric coloured rings like a lunar rainbow. The face shows signs of the abuse of the drug in the deadly pallor which is so characteristic of the cocainomaniac.

Falk describes a case as "marasmatic, with pale yellow skin, the extremities being cool and covered with a cold sweat; eyes sunken and glistening, and surrounded by dark rings. The pupils are dilated, the pulse rapid and soft. Sometimes dyspnoea is present." There is generally nervous trembling and neurasthenia in advanced cases.

The morphinist has been known to go on for years taking morphine, and increasing the dose until enormous quantities are consumed, with very little physical deterioration—some even increasing in weight. In cocaineomania, on the other hand, the coxexia is always present, being probably due to disturbance of nutrition, induced by contraction of blood vessels of the gastro-intestinal canal, and the diminished function of the liver and other glands.

After the patient has reached a certain stage in the course of this disease, certain marked mental symptoms manifest themselves. At first there is psychical over-sensitiveness, feelings of apprehension and impending death. There is great suspicion of friends, outbursts of sudden anger and irritability, and at the same time general mental exaltation.

According to *Saury*, hallucinations of cutaneous sensibility (referred to later) are the first to develop. Hallucinations of vision, hearing, taste and smell occur later. Disturbances of ideation, as delirium, are consecutive to the hallucinations. The cocaine delirium possesses the general characteristics of toxic insanities, but with certain special attributes. The delirium is essentially hallucinatory, that is, the disturbed ideation is never primary, depending constantly on sensory disturbances (illusions and hallucinations). These sensory disturbances are distressing, multiple and changeable, like those of alcoholism, but with less intensity, persistency and variety.

Cocainomania differs from morphinomania in this respect, that insanity of an hallucinatory type is inevitably developed sooner or later if the habit is continued. In morphinomania, although a mania of very similar nature does sometimes develop, it more resembles a toxic delirium, and it is extremely rare. With cocaine, transitory mania, with delusions of persecution, is not uncommon. The insomnia here becomes most persistent.

One form of visual hallucination referred to is observed in almost all advanced cases of cocaineomania, and might perhaps be more accurately described as an illusion. The patient experiences a curious itching or creeping sensation under the skin and on the scalp and tongue, and at the same time appears to see

small black or shadowy spots on the skin, shaped like an insect and appearing to move just below the skin. This condition is known as the "Cocain Bug" or "Jigger," and the optical illusion may be caused by the action of cocaine on the small arterioles of the retina, causing contraction with consequent interference with the blood supply and nutrition of the cells of the retina. Such might cause small scotomatous spots, with the effect of producing in the field of vision these shadowy specks which the patient interprets as insects. The illusion is rendered more pronounced by the itching sensation in the skin, which might be due to some special action of cocaine on the nerve-endings. This symptom—the "Cocain Bug"—may be said to be pathognomonic of cocaineomania. The patient will attempt to pick out the insect with a needle or scalpel, wherever he sees or feels it, and as a result is often covered with sores on the body and head. Accompanying these symptoms, we usually find constipation, complete anorexia, and moral degradation. The patient is lost to all moral sense, and tells the most extravagant lies. He will frequently expose himself, become dirty in his habits, and negligent of his appearance. Sexual desire, at first greatly increased in the very early stages, becomes diminished and finally abolished. Often there is depraved sexuality. Though the memory is invariably unaffected, there is sometimes loss of the sense of passage of time.

Several cases have been recorded of severe epileptiform convulsions. These usually disappear with the removal of the cause, but a case is mentioned by *Heiman* where an epileptiform seizure occurred on the withdrawal of the drug. In this case the patient resumed the habit, and ultimately died in a convulsion.

Such are the chief characters of this form of narcomania, and before referring briefly to the treatment I have added some notes of a few cases that have come under my own observation.

(a) Female, *æt.* 40, married, wife of a physician, sober habits, admitted 18-12-94. Four years before admission she started using narcotics hypodermically, and continued up to time of admission. Had taken morphine hypodermically for relief of gallstones and perihepatitis. Abandoned morphine for a few weeks at a time, at rare intervals at first, but had gradually increased amount to 20 grains per day. During six months prior to admission had been taking cocaine hydrochlor. to break off the morphine, believing it would be easy to give up the former, and was now taking 30

grains of cocain daily. Recently became very delusional; thinks people follow her; neglects household duties, and is very untidy in dress and appearance; has slight hallucinations of hearing. "Cocain Bug" illusion strongly evidenced. Sees insects in her skin and clothes, and feels them creeping over her. Is always cutting holes in her clothes and burning the pieces to destroy the insects. Has numerous sores on her hands and face from picking at the insects. Has become indifferent to all pleasures and surroundings, and her feelings and affections are perverted. From being a stout and healthy woman, has rapidly failed in health and lost weight since cocain habit commenced. On admission, is fairly rational but excited.

Skin very sallow and covered with a cold sweat. Anorexia and insomnia very marked.

Cocain absolutely withdrawn. Morphine sulph., gr. $\frac{1}{2}$, given on the second night of admission, resulted in two hours sleep.

21-12-94. Is now suffering intense depression, with great craving for cocain. Diarrhoea and vomiting have occurred. Liq. strychnie (M 10) administered thrice daily, and hot baths twice daily. Pulse very weak and collapsible.

23-12-94. Is in a condition of extreme neurasthenia, and very weak physically. Digitalis and champagne ordered. Still sleeping very badly, and complains of insects in the skin.

26-12-94. Improving slowly, but appetite very bad. Diarrhoea diminishing. Urethane, gr. 45, given at night, with result of fairly good amount of sleep.

From this time onward, she slowly improved, physically and mentally, and the urethane was gradually reduced and finally abolished.

About four weeks after admission she said she felt no craving for any kind of narcotic; was eating and sleeping well, had no delusions or hallucinations, and was rapidly gaining flesh. A week later was sent in probation with her husband, and was finally discharged some months later on a certificate from an outside physician. So far as I have been able to learn, she had had no return of the cocain habit up to three-and-a-half years after her discharge.

(b.) Male, *æt.* 37, surgeon, married. Intemperate latterly. Admitted 3-5-96. Has been a morphinist for at least 8 years before admission, and to have abstained from the drug for short intervals, when he would drink heavily and resort to chloral and chloroform. For the last 6 months has been injecting cocain subcutaneously, at first with morphine, but subsequently cocain alone. Has gradually neglected his work, and his appetite has become very poor.

For the last three weeks has become delusional, making false charges against his wife, and treating nearly everyone he knows with suspicion. Has delusions that he is being watched by people. Is violent, and has outbursts of passionate anger without any cause. Often lies naked in the yard, and defecates about the house. Is dirty and negligent in appearance, and will not wash himself.

On admission, is thin and emaciated, with sallow, earthy complexion, dilated pupils, and dry tongue. Abdomen covered with puncture marks and small abscesses. Face and extremities covered with a cold sweat. Suffers from the "Cocain Bug," and his hands and scalp are covered with holes where he has tried to pick out the insect. Has hallucinations of hearing. Memory unaffected. Is a most inveterate liar, and extremely boastful. Very restless and sleepless on the first night of admission.

5-5-96. Has all the signs of neurasthenia and depression from withdrawal of the drug, with small, feeble pulse, muscular weakness, vomiting, and copious diarrhoea. Stimulants (alcoholic) failed to rouse him, and as there were dangerous signs of collapse, morph hydrochlor. gr. i. hypoderm. was given, with slight improvement. No sleep at all this night, though sulphonal, gr. 45, was given.

6-6-96. Patient has again all the symptoms of depression in an intense degree. Liq. strychnie. M x. hypoderm., given, also 8 ounces brandy daily. Sulphonal, gr. 40, at night. Had half-an-hour's sleep towards morning.

During the next two days he showed some improvement in appetite, and was not so restless, but diarrhoea remained rather persistent.

On the 5th day after admission, sulphate of spartein, gr. $\frac{1}{2}$, was injected hypodermically, with great benefit as indicated by the pulse. Hot-air baths also ordered frequently. The spartein treatment was continued regularly for about six weeks, and then gradually left off, and the patient was discharged nine weeks after admission, in fairly robust health, eating and sleeping well, and with no cocain craving.

Since these notes were written I have learnt that this case relapsed a year later, and resorted to morphine without cocain.

In two other cases, one a male *æt.* 34, and one a female *æt.* 40, the symptoms and course of the disease were almost precisely the same as in the two cases previously mentioned, but in each instance the drug was withdrawn suddenly and stimulants given for a few days, after which spartein sulphate in the former case, and trinitrine in the latter, were administered subcutaneously, with rapid recovery in both cases.

In briefly summarising the treatment of cocaineomania, I am forced to the belief that the best results are obtained by the sudden withdrawal of the drug, for although in such cases the depression and the intensely agonising symptoms are more severe, yet the period of recovery from the craving is shortened out of all proportion to that resulting from gradual withdrawal, in which the symptoms frequently last several months instead of a few weeks as in the "sudden" method.

The great over-activity of the liver and other glands, which occurs on the cessation of the drug's action, is one of the most troublesome symptoms. The intolerance of the stomach and bowels usually lasts about two weeks. Hot-air baths appear to greatly reduce the severity of the withdrawal, and are also useful in combating the insomnia, especially if followed when practicable by a cold douche; and it is a good plan to continue the hot-air baths for a considerable time after recovery to prevent relapse. Spartein and trinitrine appear to be as useful in this affection as in morphinism, possibly acting more in the manner of heart tonics than as substitutes for cocaine; however, it is certain that at one stage they relieve the morbid craving.

As to the question of exercise, one observer has pointed out that during the period of withdrawal in some patients there is great prostration, and in others great restlessness. In the latter case cycling would be very beneficial—locomotion without fatigue. The weight of the body being removed, the limb exercise gives the greatest relief for the restlessness without causing fatigue that might bring about increased craving.

The conclusions I have come to are, that cocaine should never be administered as a substitute for morphine in treating inebriety from that or other drugs, that it is far more insidious than morphine and more difficult to cure; that although the majority of cases relapse, it is unquestionably a curable disease in some instances; and that rapid withdrawal is more satisfactory than progressive reduction.

We have received from Mr. G. Hudson, Chemist, Ipswich, Queensland, a sample box of his "Eumenthol Jujubes" (see advt. p. 146). They are very strongly impregnated with menthol and other ingredients, and should prove of great service in affections of the voice and throat. Mr. Hudson will be pleased to send a trial sample with the formula to any physician upon application.

FOUR SOMEWHAT UNUSUAL CASES OF ABDOMINAL HYDATID.

By H. CRITCHLEY HINDER, M.B., CH. M. SYD., SYDNEY.

HYDATID disease is extremely common, but now and again cases crop up which have some points of special interest attached to them, and make their record of some value to all of us.

CASE I. was a woman of 35, who was three and a-half months pregnant, and had pains and increasing discomfort in the pelvis. On examination two rounded, hard tumours could be felt in the pelvis, one closely attached to the cervix, the other higher up and somewhat more movable. It was obvious that these would seriously obstruct labour, and considering the size of the uterus would be so held down as to preclude the possibility of removal unless the uterus was considerably reduced in size. After consultation with Drs. Traill and Blaxland it was decided to do so. The uterus was emptied by injections of glycerine through a catheter introduced well up into the uterine cavity. Three weeks afterwards the abdomen was opened and two hydatid cysts were removed by shelling them out, one from the broad ligament, the other from its broad basal attachment to the cervix on the one hand, and the rectum on the other. Both cysts were very tense, and full of daughter cysts. No drain was used, and an aseptic recovery eventuated. These cysts certainly bore a marked resemblance to fibroid tumours, but gave rise to no symptoms.

CASE II. was a woman in whose abdomen could be felt at least four or five hydatid cysts, and the interest shown in the curious condition of her abdomen by a number of observers probably accounted for the ruptured cyst found at the time of operation.

A vertical incision ten inches long was made through the right rectus. Some clear fluid escaped, and on drawing aside the matted omentum an endocyst was found hanging out of its ectocyst. This was completely removed and the ectocyst left; three other cysts were shelled out of their extensive adhesions to omentum and intestine without excessive hæmorrhage. Another one was attached to the brim of the pelvis, and a sixth, which fitted very accurately into the bottom of the pelvis, was lifted out intact. The removal of these left the patient's abdomen rather in an entangled mass, so that a seventh cyst which was retroperitoneal and resting on the spleen and against the abdominal wall was left for another occasion, as it could more easily be got at from without.

The abdominal contents were dried, and the wound stitched up without drain. There was some tenderness with rise of temperature to 101° , and pain from the fifth to the ninth day over the site of the ectocyst which had been left behind, and was due, I think, to the ectocyst having filled with serum and probably burst free again.

The rupture of the cyst had given rise to no special symptoms. There was only a slight rise of temperature to 99.6° for three days before operation.

The wound healed by first intention, and a good recovery took place.

CASE III. was a man of 28 years with a hydatid as large as a cricket ball in his omentum on the right side. His abdomen was opened, the cyst was incised, and the endocyst removed, the collapsed ectocyst was left, and the abdomen closed. The patient recovered without a symptom. Ten weeks after he returned to me to say that the cyst had grown again. This time it was attached to the abdominal wall. I opened through the old incision, and so far as I could judge the cyst was in the self-same position and about the same size. It was filled with serous fluid only. To ensure its obliteration I attached it more firmly to the peritoneum and inserted gauze. The gauze was renewed in less quantity every other day, and an uneventful recovery experienced.

This method of emptying and leaving the ectocyst is a good one, but open to one or two objections. If the rent in the ectocyst is enlarged so as to minimise the chances of the cyst closing and filling up with serum, there is a possibility of a piece of bowel being caught or attached to its gaping opening. Unless a large rent be made their appears to be a fair probability that the cyst will close and fill with serum, and give rise to further trouble.

Probably it would be better to turn the cyst inside out and stow it away next the abdominal wall, or in such a way that adhesion to intestine, etc., will hardly be possible, or to flap a piece of omentum within the opening and over the raw surface, so that further adhesion will be prevented.

CASE IV. was an aboriginal 42 years old, who had been operated upon twice previously for abdominal hydatids. On opening his distended abdomen, I found his intestines and omentum somewhat in a state of chaos, but at the back of these there was undoubtedly a hydatid. After working through to the cyst wall I found the cyst stuck fast posteriorly and all round, and still its anterior surface was quite

four inches from the abdominal wall. I did not wish to empty hydatid fluid, or perhaps daughter cysts, into the peritoneal cavity, so having cleansed a space on the cyst wall about the size of a five shilling piece, a roll of gauze one inch wide was placed with one extremity on the bared space and the other protruding from the wound, and as far as possible omentum wrapped round it. In thirty-six hours the roll of gauze was removed, and a round tube of omentum lymph, etc., was seen to lead from the abdominal wall to the cyst wall. A knife was passed down this tube, the cyst wall opened, a number of daughter cysts evacuated, and a large drainage tube inserted.

This plan of forming a lymph tube has often proved useful to me in opening pus collections, etc., in the abdomen when the patient is well able to wait 18 or 24 hours before finally evacuating. It only needs a little patience on the part of operator and patient, and the delightful part about it is that in selected cases it makes a dangerous intraperitoneal operation practically a very simple and safe extraperitoneal proceeding.

A DERMOID CYST.—FREE IN THE PELVIS.—REMOVAL BY POSTERIOR VAGINAL CÆLIOTOMY.

By J. B. NASH, M.R.C.S., M.D., WALLSEND, N.S.W.

DR. J. HALLIDAY CROOM, in a paper read before the Obstetrical Society, Edinburgh, and published in the *Edinburgh Medical Journal* for January, 1897, writes of "Some Peculiar Relations of Abdominal and Pelvic Tumours." He narrates six cases, in four of which the tumour had no pedicle or attachments—"a simple ovarian cyst; an ovarian tumour; a simple parovarian tumour; a free hæmatosalpinx." He proceeds: "So far as I can discover, I can find no reference to detached ovarian tumours or cystic tumours without some definite relation to an abdominal or pelvic organ. It is true that Sir James Simpson says that he has seen several cases in the dead body in which tumours were lying free in the abdominal cavity, but he gives no details, and evidently refers to fibroids, as he says that the tumours had no connection with the uterus." "With regard to some of the tumours I have just referred to, they must be very rare, but the case is somewhat different when we come to speak of fibroids. . . ."

The following case, which came under my observation in June, 1898, will add one to the list. Further, it differs in variety from any of them.

Mrs. M. S., *æt.* 30 years; 12 years married, three para and one miscarriage. Born New South Wales. She was placed under my care by Dr. Stapleton. Her personal history was of no importance.

She had been troubled for some time with an uncomfortable feeling, sometimes amounting to pain, at the lowest part of the abdomen and in the region of the sacrum. There was also some irregularity about her menstruation, and between her periods there was a leucorrhæal discharge. Her uterus was curretted in the beginning of 1898.

Physical examination of pelvis: Nothing to be detected from the abdomen.

Per vaginam: Perineum had been torn, and the raw surface had healed over without approximation of the edges. On separating the labia, the posterior vaginal wall seemed to have a tendency to press through the vaginal orifice. An attempt to vomit made this particularly noticeable. The fingers entered a spacious canal. The cervix uteri was normal in size, multiparous in condition, and in good position. On pressing the digits into the posterior vaginal cul-de-sac, a lump was felt lying above it, and mostly to the left of the mid sagittal line, it could be freely moved with the fingers.

Bimanually the uterus could be moved without any effect being produced on the tumour. The right ovary and adnexa were quite palpable, the left ovary not so definitely discernible.

By recto-vaginal and abdomino-recto-vaginal palpation, the neoplasm could be freely displaced, the greatest area of movement being from the neck of the bladder and to its right side backwards and upwards, behind the cervix uteri to the hollow of the sacrum on the left side, it lying here in close proximity to the rectum.

A finger in the bowel could reach beyond the tumour, and when hooked around its upper end it could be made to push the upper part of the posterior vaginal wall to the vaginal orifice.

Diagnosis: It was from its weight and regularity of surface evidently a fluid accumulation. Its movements being independent of the uterus or the contents of the broad ligaments, it could have no short or firm connection with these. Further, its free range of mobility diagonally across the pelvis pointed to some loose, if any, attachments somewhere in or below the pouch of Douglas. Some anatomical deviation from the normal must have existed in the utero sacral ligament of this woman, else the tumour would have been caught in one of the peritoneal depressions normally seen between the

posterior lateral walls of the true pelvis and the posterior aspect of the uterus and broad ligaments; further, the free movement from low down on the posterior vaginal wall upwards and to the left could not have been made were the left semilunar fold of the peritoneum in its ordinary position stretching from the cervix uteri to the sacrum. In the diagrams of the peritoneum in Hart and Barbour's "Manual of Gynecology," 1882 ed., fig. 41, the serous membrane is shown "dipping abnormally deep between the rectum and vagina (*Pirogoff*). Such may have been the existing condition in this case, and by it the tumour was allowed to slip low down along the posterior vaginal wall.

Operation: An incision into the posterior vaginal cul-de-sac at once reached the peritoneum; when the opening was enlarged transversely some omentum presented. Through the wound the tumour could be felt lying in the left side of the sacral hollow. The right index finger in the rectum was able to reach above it and to make it present at the wound, it could then be seen to be fluctuating. With the finger some fibrous shreds which appeared to stretch over it were easily separated, then its surface was smooth and glistening. Its size, about that of a goose egg, was too great to allow it easily to be pressed into the vagina. A touch with the point of a knife allowed thin creamy material to flow away; its delivery was then easy. A careful examination of the pelvis through the peritoneal opening failed to reveal connections with any adjacent structures, nor could any bleeding points be seen.

A continuous catgut suture closed the vaginal roof. A piece of iodoform gauze in the uterine cavity, and the same material in the vaginal canal completed the operation.

Examination of the tumour found it to be a smooth-walled cyst, with no indication on its external surface of its having had a pedicle to attach it to any abdominal organ. The contents were: a thin creamy fluid, a ball of light brown hair loosely rolled and free in the fluid, some individual hairs five or six inches long. It was therefore a dermoid cyst. Pozzi says: "A collection of sebum, resembling the vernix caseosa, fills, more or less completely, the sac, and often forms kinds of isolated balls." This fat, which has occasionally an oily consistency, encloses a large number of epithelial cells, crystals of cholesterin, and of the fatty acids."

The patient made a satisfactory recovery, with relief from all signs and symptoms.

A CASE OF SIMPLE ULCERATIVE ENTERO-COLITIS.

BY JOHN MACPHERSON, M.A., B.Sc., M.B.,
CH.M. (SYDNEY), GLEN INNES, N.S.W.

THE subjoined notes describe a case I saw as House Physician at Prince Alfred Hospital.

Patient, a woman, aged 29, married, was admitted on May 28th, 1898, having been seen in the Out-Patients' Department by Dr. G. E. Rennie. She gave a history of three months illness, beginning insidiously with diarrhoea, and gradual weakness and wasting. With some remissions the purging continued up to the date of admission. Transient pains in left side of abdomen; no tenesmus. Vomiting at first absent, had recently supervened. Severe headaches. Profuse night sweats. Urine hot and scalding.

Patient had never resided in tropical countries; came from a farm in Southern New Zealand. No potus or drug-habit. Had influenza twice and scarlet fever. Father had died of phthisis and heart disease. Four sisters suffered from "inflammation of lungs." Cancer on mother's side. "Paralysis" in father's family.

Patient was profoundly emaciated, looked aged far beyond her years. Skin, lemon yellow in colour, no ecchymoses or hæmorrhages. Appetite capricious. Tongue pallid, flabby, tremulous, moist, white coated. Aphthous patches on tongue and inside of lips. Fauces injected. Slight abdominal distension, with tenderness over left side—no actual pain. No abnormal dulness. Liver and spleen not enlarged. Motions fluid, light yellow, with greenish spangles, not foul. No mucous, blood, or sloughs. Pulse 112, quick, small, regular. Cardiac impulse in fourth interspace. Faint systolic (hæmic) bruit at apex and pulmonary area, and root of neck on left side. Microscopic examination of blood revealed nothing characteristic—rouleaux well formed. Respirations 24; no cough; no physical signs of abnormality in lungs. Eyesight failing recently. Optic discs uniformly pale; no morbid change in vessel walls; blood itself pallid. No retinal hæmorrhages. Temper irritable and despondent. Slight tenderness over sternum; none over tibiae or ribs. Ankles, wrists and elbows painful. Urine 1018, acid, no albumen. Temperature 101.5° F.

The subsequent course was attended by constant and progressive emaciation, although brief intervals occurred, during which strength appeared to be slightly regained. The tongue

also, at times, would feel less sore and seem cleaner and smoother, to be soon again covered with aphthous patches and spots, especially so towards the tip. Vomiting varied in severity. Motions at times more formed, and though occasionally the bowels were opened but once in the twenty-four hours, laxity, or diarrhoea even, was the rule. No tenesmus or tormina. Actual abdominal pain was absent, but slight tenderness was sometimes experienced. Hæmic (systolic) murmurs audible in mitral, aortic, and pulmonary areas, and root of neck. No conduction of apical bruit toward axilla, and no displacement of cardiac impulse outwards. Lungs clear throughout. Insomnia alternated with fair sleep. The temperature showed an irregularly remittent pyrexia. For the first twelve days it rarely descended below 100° F. in the evening, attaining a height of 103°, or even above 104°. During the next thirteen days, a lower level (99° to 100°) was maintained. Then marked irregularity was observed, rarely however was a descent made to the normal—the evening and morning readings alike being elevated. Just prior to death a rapid fall took place from 102° through 98.6°, and 97° to 96°. The urine was always light in colour, 1006-1020, no bile, no albumen. On the 3rd of July, the patient died from absolute exhaustion.

As regards treatment, neither drugs, dieting, nor hygienic measures were of the slightest avail. The following preparations were administered without any remission of the symptoms:—Blaud's pills (B. W. & Co.'s ferruginous tabloids); perchloride of iron, with hydrochloric solution of arsenic; laudanum, 1 grain opium pills, lead with opium pills; tincture of catechu, with dilute sulphuric acid; liquid extract of red gum; eucalyptol; salol; salicylate of bismuth, and a modification of Sir J. Fayrer's prescription for psilosis—perchloride of mercury, paregoric, chloric ether, and water. In addition, enemata of cold starch and opium were exhibited. For the vomiting, tincture of iodine internally, and borax and myrrh for the stomatitis were employed.

An exclusive milk diet was for some time tried, later with the addition of beef-tea or chicken broth. These with Benger's Food, Carnrick's Liquid Peptonoids, virol, bread and butter, and light puddings of sago, arrowroot or rice, comprised the whole food, with port wine or brandy as stimulants. Absolute rest was enjoyed throughout, either upon the couch in the sunshine, or in bed within the ward.

The husband having permitted me to conduct an autopsy, I was enabled to make the following observations. Profound emaciation with

absence of fat everywhere. Blood fluid, thin and pale, of a pinkish hue. Lungs oedematous, otherwise healthy. Heart, normal. Liver and spleen, small. Gastric mucosa, pallid. Small intestine (with exception of lower ileum), no macroscopic lesion. Large intestine (more particularly the cæcum,) darkly brown—pigmented. Masses of ulcers were found with clean-cut sharp margins, and round or oval outlines, some extending down to the peritoneal coat, but none actually perforating. The ulcers measured from one-quarter to an inch or more in diameter, and, in places, especially the cæcum and ascending colon, had coalesced, forming large irregularly-outlined patches; no induration of edges or floor of ulcers. The cæcum was most affected, the lower ileum, ascending and transverse colon less extensively so. The descending colon and sigmoid flexure displayed smaller superficial abrasions, and submucous areas of hyperæmia. The mesenteric lymphatic glands were enlarged and firm.

In the diagnosis, typhoid fever and ordinary chronic enteritis were readily excluded, as also was cancerous peritonitis. Tubercular disease of the peritoneum or intestine, suggested by the family record, was not definitely put aside before the *post mortem* had been made. The tinge of the skin closely approximated to that of pernicious anæmia, but there was no further evidence of such disorder, although so intense a blood dyscrasy as was here observed, made one search for some cause other than even a fatal diarrhoea. The intestinal symptoms, associated with vomiting and aphthous stomatitis, reminded one of gastro-enteritis aphthosa—the tropical disease psilosis or sprue, the pathology of which, however, is utterly dissimilar. A thorough search for amebæ was impracticable at the time, but it is barely probable that a case of true dysentery would originate in the uplands of Southern New Zealand, where the symptoms first supervened. It was, I have no doubt, an example of simple ulcerative enteritis and colitis. In describing this affection, Osler remarks, that it is not very uncommon, and by no means infrequent, at the Philadelphia Hospital, being most often observed in men beyond middle life. Hale White found it equally common in the two sexes. In this instance, paroxysmal griping pains, with bloody, offensive motions, indicated by Fredk. Taylor as symptoms, were absent.

"HYPERTROPHY of the Thymus Gland," a paper by Dr. G. P. Dixon, of Brisbane, which appeared in *Australasian Medical Gazette*, 20th December, 1898, is quoted fully in *Medicine*, March, 1899.

A CASE OF INTERMITTENT HYDRO-NEPHROSIS IN A CHILD SUCCESSFULLY TREATED BY OPERATION.

By E. F. SETZKE, M.D., BROKEN HILL, N.S.W.

HERBERT Fl., ten years of age, was thrown from a horse about eighteen months ago. He had always been in good health, but soon after this accident he began to complain of pains in his back, abdomen and legs, especially in the right side. However, no notice was taken of this for a time, the parents ascribing it to his having been severely shaken by his fall.

Yet, as the pains continued and the boy's health seemed to suffer visibly, Dr. Harvey was called in about fifteen months ago. By this time the symptoms had become marked and well pronounced. Longer or shorter intervals of good health were followed by violent attacks of indisposition. Each of these attacks was introduced by a suddenly-occurring pain in abdomen and back, mainly on the right side, and extending into the legs. It always was of an overpowering, excruciating nature, not infrequently accompanied by vomiting, and causing the patient to cry out loudly; cold perspiration used to break out, the limbs turned rigid, even a slight touch on the abdomen was unbearable, and regularly each time urination ceased, and often the bowels did not move. Narcotics relieved the boy, until after a sudden big flow of a thick, dark-brown urine—the time varying from hours to days—all pain disappeared and the child enjoyed his normal health again. These attacks occurred about once a week.

After having been in attendance for some time, and having never been able to discover any gravel or stones in the urine, Dr. Harvey diagnosed hydronephrosis, most likely due to a ren mobilis with the corresponding ureter being temporarily twisted.

Meanwhile the parents decided to commit the boy to the care of the Children's Hospital at Adelaide. He stayed there for three weeks, but after leaving the institution the attacks followed each other more rapidly, with scarcely even one day being free from them. I may perhaps mention that the mother thinks her son had about 100 attacks within nine months.

Finally I was called to see the boy with Dr. Harvey on October 20th, 1898, during one of his attacks. The patient appeared to be a well-developed child. There was no fever; the right regio mesogastrica was slightly prominent. Under anæsthesia I felt a tumour

underneath the liver and protruding from the region of the kidney, having the size of about a child's fist, and being distinctly outlined; it was of a circular form, not fluctuating, and scarcely movable. The respiration did not cause corresponding movements of the tumour. By examining with one hand from the "quadratus lumborum," with the other from the abdomen, the connection with the kidney was ascertained. The "colon ascendens" could be felt on and above the tumour.

Next morning a large quantity of thick, dark-brown urine was passed, and analysed: Reaction, acid; specific gravity, 1021; a quantity of urates; no albumen, except alime and flat epitheliums as they exist in pelvis renis and ureters; no blood or blood corpuscles; no gravel or stones. A second examination revealed the fact that the tumour had disappeared, and that the kidney was slightly movable. The following diagnosis was made: Hydronephrosis intermittens dextra, due to a ren mobilis blocking in its movements the entrance of the ureter, the movableness of the kidney having originally been caused by an injury. This diagnosis was supported by the fact that while the boy was kept in bed in the Children's Hospital at Adelaide only one attack occurred within three weeks. The latter reason, and the important argument that at no time blood, gravel or stones could be detected in the urine, made it highly improbable that the attacks could be traced to an occurrence of this kind, although, not being absolutely out of the question, I decided to pay particular attention to this point. Judging from the shape and position of the tumour, an obstruction within the course of the ureter appeared improbable, or rather impossible.

An operation was proposed and performed by me, with the assistance of Dr. Harvey, on November 1st, 1898, the tumour having disappeared. Under narcosis; lumbar incision was made of about 9 cm., with a smaller cross-incision on the top of the wound. After having deliberately opened the peritoneum I examined the kidney carefully, searching for an abnormal resistance, also the pelvis renis, the kidney being pressed into the wound at the same time by an assistant. Nothing abnormal could be felt anywhere, except that the kidney appeared movable.

Having satisfied myself on this point, I proceeded to fasten the kidney by three silk sutures, which went right through its substance to the muscles of the wound. Superficial silk sutures closed the incision, with the

exception of about 3 cm. in the lower angle. This part I filled with sterilised iodoform gauze right to its depth, intending it to heal by granulation, and in this way to make the connection between kidney and muscle-wall stronger and more lasting. An antiseptic dressing covered the operated part of the body.

The wound proceeded to close without reaction; within a fortnight even the lower part had united by granulation. As a precautionary measure, the patient was kept in bed for three weeks more to allow the union to become permanent and solid. After that time he was permitted to leave the bed, to walk about and to play with other children.

Never since the day of the operation has the boy suffered from any of the dreaded attacks, or even from the slightest irregularity or inconvenience in passing his urine. The latter, several times analysed by me, was always found to be normal. And, finally, I may add that the improvement in the general health of the child has been remarkable and surprising.

A CASE OF VEGETABLE POISONING.

By J. E. MOFFITT, L.R.C.S.I., L.K.Q.C.P.I.,
GREENOUGH, W.A.

A SHORT time ago a little boy, aged 5 years, was brought to me by anxious relatives, who stated that he had suddenly fallen down after coming into the house about tea time, and exhibited signs of having been poisoned by something. I observed symptoms almost exactly resembling those of belladonna poisoning. There was wild muttering delirium, dryness of throat and mouth, and dilated pupils, while, at the same time, the child threw his arms and legs about in an aimless manner, and talked incoherently. There was no deadly nightshade growing in the district, nor was there any poison of the atropa belladonna kind in the house; so I questioned the friends, and found that the child had been chewing a plant which grows in this locality, and bears a yellow flower at this time of the year. When the child was brought to me, the poison had thoroughly entered the system. I gave Potass. Bromid. gr. xv., and Chlor. Hydrat. gr. iv., and in less than half an hour gave a similar dose of the same drugs. No benefit ensued, so I stopped the bromide, and continued giving Chloral. Hydrat. in four-grain doses for about five hours, until 16 grains had been taken. Only slight relief followed, so I tried six drops of Tinct.

Opii, and sleep was produced in about half-an-hour. The boy awakened almost well in about six hours, and soon recovered. The pulse continued strong during the whole of the attack, and there was no temperature.

I sent specimens of the plant to Perth, and received reports from Mr. E. Bickford, President of the Mueller Botanical Society, and Mr. Lindley Cowen, Secretary of the Bureau of Agriculture, both of whom said the plant was known as the *Anthocercis littorea* Solanaceae. Mr. Cowen mentioned that reports of deleterious effects of the plant upon children had come from other parts of the colony. He further stated that the natural family of the *Anthocercis littorea* was closely related to that of *duboisia*, a drug used in place of atropine; so that the similarity of the poisonous effects to those of belladonna, mentioned by me, are intelligible. Although well known in this and other parts of Western Australia, the *Anthocercis littorea* bears no popular name; hence the difficulty of warning school children against it. To show the small amount capable of producing effects, I can state that another child of six years, who was reported to have simply chewed a leaf and spat it out, showed undoubted signs of poisoning during the night. Thus far no cases have proved fatal.

The numerous and varied flora of Western Australia will in the future afford great scope to the botanist and chemist, in providing popular and scientific remedies for mankind.

ARTIFICIAL EYES.

ADDENDUM to Dr. T. K. Hamilton's remarks on page 161.

Since writing the foregoing I find from the latest issue of the *Ophthalmic Review*, just come to hand (vol. XVII, p. 347), that Müller and Sons have been making these new artificial eyes on the suggestion of Prof. Snellen, of Utrecht, who claims for them advantages similar to those I have claimed, and he is also having another modification made with a convex posterior surface to suit more sunken or deeply excavated sockets.

A new alloy has been discovered which is said to be a wonderful substitute for gold. It consists of 94 parts of copper to 6 parts of antimony. The copper is melted and the antimony added, together with a little magnesium and carbonate of lime to increase the density. The product can be drawn, wrought, and soldered like the precious metal, to which it bears a striking resemblance when polished. The cost of manufacture is about 24 cents a pound.

PROCEEDINGS OF BRANCHES.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE Annual Meeting was held in the Royal Society's Rooms, on Friday, 24th March, 1899, at 8.15 o'clock. Dr. Wm. Chisholm, President, in the Chair, there were also present:—Drs. Samuelson, Knaggs, Crago, Pockley, Hankins, E. Thane, H. Browne, Sinclair Gillies, J. A. Dick, Mullins, G. A. Marshall, Jenkins, Lloyd, Collins, F. Hall, Fiaschi, F. H. Quaife, Manning, Todd, Lawson, Goode, G. Armstrong, Gladden, Neill, Hinder, Thring, Coutie, Mills, Thomas, Hughes, Litchfield, West, Maitland, Binney, Faithfull, Pope, Tidswell, Gill, Magnus, Gordon MacLeod, Brady, Jamieson, Chenhall, and others. Visitors: Drs. Ludowici and Cosh.

The minutes of the previous meeting were read and confirmed.

The President appointed Drs. E. Thane and H. Browne, as Scrutineers, and Drs. Samuelson and Maitland, assistants.

The PRESIDENT announced the election of the following gentlemen:—Drs. J. MacPherson, E. C. Hall, E. M. Pain, N. W. Kater, H. Stoker, W. C. Robinson, P. E. Cooley, George Goode, Thos. Davis, and C. B. Pym.

The HON. SECRETARY (Mr. G. T. Hankins) read the report of the Council.

ANNUAL REPORT FOR THE YEAR 1898.

YOUR Council, in presenting the report on the work of the past year, again congratulate the members on the steady advancement of the Branch.

There are 373 members on the roll, being an increase of three upon the previous year; there have been six resignations; four deaths (Drs. Anderson, J. E. O. Henry, Lillie, and Sir Alfred Roberts) have occurred; eleven members were struck off the list owing to non-payment of subscriptions; twenty-three members were elected during the year.

The Hon. Secretary (Dr. George E. Rennie) resigned his position owing to a visit to England. The thanks of the members are due to Dr. Rennie for his untiring efforts in promoting the welfare of the Branch. Mr. George T. Hankins was appointed to fill the vacancy caused by the resignation of Dr. Rennie.

Nine General meetings and fifteen Council meetings were held during the year. The scientific work of the session has been somewhat interfered with owing to a number of meetings being taken up with the discussion of political and ethical questions, to the exclusion of papers of a purely professional interest. Twelve papers on various cases of interest were read, and six exhibits were shown and explained.

Dr. Sydney Jones and Dr. G. E. Rennie were appointed to represent this Branch on the parent Association during their stay in England.

The sub-committee appointed to manage the *Australasian Medical Gazette* (Drs. Worrall, Crago, and Knaggs) have carried on the work in a highly satisfactory manner, and deserve the thanks of the members for the amount of energy and perseverance with which the very heavy work in connection with the publication of the *Gazette* is performed.

On the 25th October, 1898, a general meeting of the profession was held at the Royal Society's Room for the purpose of discussing the provisions of the Midwifery Nurses Bill, which had been introduced into the Legislative Assembly by Dr. James Graham, M.P. After considerable discussion a sub-committee was appointed to draw up a schedule of amendments, which was presented to Parliament.

The financial statement shows a credit balance of £116 8s. 9d.; the total receipts from all sources amounted to £757 11s. 6d.; the expenditure for the year was £738 18s. 4d.

A list of the attendances of Councillors at the Council meetings is appended hereto, together with the list of the papers read at the General meetings.

WM. CHISHOLM, President.

GEORGE T. HANKINS, Hon. Secretary.

ATTENDANCE OF COUNCILLORS AT COUNCIL MEETINGS.

(Fifteen meetings were held).

Meetings attended.		Meetings attended.	
Dr. W. Chisholm ...	14	Dr. Jenkins...	8
Dr. Thring ...	10	Dr. Knaggs ...	9
Dr. Crago ...	15	Dr. McCormick ...	8
Dr. Clubbe ...	10	Dr. Quaife ...	10
Dr. Coutie ...	13	*Dr. Rennie ...	8
Dr. Clark ...	9	Dr. Worrall...	14
Dr. Fiaschi ..	13	†Dr. Hankins ...	5
Dr. Foreman ...	8		

* Resigned 26th August. † Appointed 30th September.

PAPERS.

Dr. Camac Wilkinson—The Scientific Basis of the Prevention and Treatment of Consumption, with Special Reference to the Use of the Old and New Tuberculin.

Dr. Clubbe—Three Cases of Laparotomy, done for Perforation of the Hollow Viscus.

Dr. Kinder—Notes on Four Cases of Prostatectomy.

Dr. Gordon Craig—Notes on a Case of Prostatectomy.

Dr. F. H. Quaife—Notes on a Case of Gastric Ulcer.

Dr. Kirkland—Notes on a Case of Cerebellar Abscess Following Suppuration of the Middle Ear.

Dr. McCormick—Notes on Three Cases of Supra Pubic Lithotomy.

Dr. Jamieson—Widal's Serum Reaction: Its Value as a Test for Typhoid Fever.

Dr. Crago, for Dr. Scott-Skirving—Notes on the Prevailing Epidemic of Measles and Influenza.

Dr. Sinclair Gillies—Notes on Three Cases of Epidemic Cerebro-Spinal Meningitis.

Drs. Fiaschi and Isabier—Notes on a Case of Amoebic Abscess of the Liver and Lung.

The Hon. Dr. Creed—My Experience of Hypnotic Suggestion as a Therapeutic Agent.

EXHIBITS.

Dr. J. B. Nash—Anencephalous foetus.

Dr. Brady—Skull showing where the incisions were made in the exploratory examination in case of cerebellar abscess following disease of the ear.

Dr. Crago—Patient suffering from symmetrical enlargement of the epiphysis of the tibia.

Dr. Thring—Specimen of uterus, together with ovaries and fallopian tubes; from the upper and right side of the uterus a large single fibro myoma was growing.

Dr. S. H. Hughes—Case of pigmentation of the conjunctiva.

Dr. J. B. Nash—Case of Schede's Thorax re-section.

TO THE COUNCIL OF THE NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

The *Gazette* Sub-committee has the honor to report that the affairs of the *Australasian Medical Gazette* have continued in a satisfactory condition during the year 1898. As was predicted in last year's report, there has been some falling-off in the amount of receipts; still, the earnings for the year considerably exceeded the expenditure. In accordance with a resolution arrived at at one of your meetings, the books of the *Gazette* have been kept more in accordance with the ordinary commercial system of book-keeping, and a balance-sheet, together with particulars of profit and loss account, drawn up by the supervising accountant (Mr. H. W. Chambers), and duly audited, is presented herewith. It is a matter for regret that the advertising columns are again rather low, especially as through a decision arrived at during the year to make an allowance to the Branches of from 5 per cent. to 10 per cent. on the amount charged for the *Gazette*, a large diminution may be expected in the receipts for subscriptions.

S. T. KNAGGS,
RALPH WORRALL, } *Gazette*
W. H. CRAGO, } Sub-committee.

January, 1899.

Dr. CRAGO (Hon. Treasurer) read the report of the *Gazette* Sub-Committee, and the Financial Statements of the *Gazette* and Branch Funds, and moved the adoption of the Report and Balance Sheets. Dr. F. H. QUAIFFE seconded the resolution which was carried.

The PRESIDENT (Dr. Wm. Chisholm) read his Presidential Address:—See p. 152.

Dr. MANNING proposed—"That a hearty vote of thanks be accorded to Dr. Chisholm for his Presidential Address."

Dr. KNAGGS seconded the resolution which was carried by acclamation. Dr. Wm. Chisholm acknowledged the vote.

Dr. Crago proposed—"That Drs. Sydney Jones and Rennie be appointed representatives of the New South Wales Branch on the Council of the British Medical Association." Carried.

Dr. R. H. Todd and Dr. Jarvie Hood were appointed Auditors.

The PRESIDENT announced the result of the ballot for Office-Bearers and Council, as follows:—President, Dr. E. T. Thring (unopposed); Vice-President, Dr. W. H. Coutie (unopposed); Councillors, Drs. Wm. Chisholm, Hankins, Worrall, Knaggs, Crago, McCormick, Foreman, Brady, Clark, Clubbe, Abbott, and F. H. Quaife.

Mr. HANKINS proposed—"That a vote of thanks be given to the Scrutineers for their difficult work in connection with the ballot." Seconded by Dr. JAMIESON and carried.

Statement of Receipts and Expenditure for the Year ending December 31st, 1898.

RECEIPTS				EXPENDITURE			
January 1st, 1898.				January-December, 1898.			
To Balance in Banks...	...	...	£ 97 15 7	By Draft to Parent Association for B.M.J.	...	...	£ 860 7 0
" Petty Cash	...	...	0 14 7	" Cost of ditto	...	...	2 12 6
" Subscriptions received	...	...	748 7 6	" <i>Australasian Medical Gazette</i>	...	...	258 0 0
" Interest received...	...	...	7 6 9	" Assistant Secretary, Honorarium	...	...	30 0 0
" Amount added for Exchange	...	...	1 2 8	" Assistant Librarian	...	...	20 0 0
				" Rent (Royal Society)	...	...	10 0 0
				" Solicitor	...	...	13 13 0
				" Refreshments	...	...	10 5 0
				" Postage Stamps	...	...	16 18 11
				" Printing	...	...	4 18 0
				" Library (Binding Periodicals, &c.)	...	...	3 10 9
				" Exchange on Country Cheques	...	...	3 11 0
				" Collector's Commission	...	...	1 2 0
				" Cheque Book (Printing and Stamping)	...	...	2 0 2
				" Impressed Receipt Stamps (240 at 2d.)	...	...	2 0 0
				" Balance in Banks...	£115 9 7		
				" Petty Cash	0 19 2		
			<u>£855 7 1</u>			116 8 9	
						<u>£855 7 1</u>	

Examined and found correct,
ROBT. H. TODD,
A. JARVIE HOOD, } AUDITORS.
February 16th, 1899.

W. H. CRAGO, HON. TREASURER.

The "Australasian Medical Gazette" Balance-Sheet for Twelve Months Ending 31st December, 1898.

LIABILITIES.				ASSETS.			
To New South Wales Branch, B.M.A.	...	...	£ 740 0 0	By Goodwill of the <i>Australasian Medical</i>	...	...	£ 1,150 0 0
" Bills Payable	...	...	174 12 0	" <i>Gazette</i> at cost	...	...	456 18 7
" Sundry Creditors (including the sum of £110 18s. 8d. in suspense on account of Advertisements Contracts)	...	...	306 10 5	" Sundry Debtors	...	...	284 0 3
" Reserve for Bad Debts (after writing off the sum of £14 7s. 1d.)	...	...	4 10 0	" Cash at Bankers	...	...	1 2 0
Profit and Loss Account	...	...	666 8 5	" in hand	...	...	285 2 3
			<u>£1,892 0 10</u>				
						<u>£1,892 0 10</u>	

PROFIT AND LOSS.

DR.				CR.			
31st December, 1898.				31st December, 1897			
To Rent and Gas	...	...	£ 55 6 8	By Balance	...	...	£ 553 16 1
" Printing	...	...	688 18 10	1898.	...	...
" Salary of Clerk	...	...	52 0 0	" Revenue from Subscrip-	...	...	£795 12 3
" Postages	...	...	52 13 5	" tions	...	...	517 4 7
" Bank Exchange	...	...	1 10 3	" Advertisements	...	...	1,312 16 10
" Discounts	...	...	40 12 8				
" Commissions	...	...	7 10 0				
" Management and General Expenses	...	...	282 15 7				
" Provision for Bad Debts	...	...	18 17 1				
" Balance	...	...	666 8 5				
			<u>£1,866 12 11</u>				<u>£1,866 12 11</u>

5th January, 1899.

H. W. CHAMBERS, SUPERVISING ACCOUNTANT,
70 Pitt-street, Sydney.

We have examined the books and vouchers of the *Australasian Medical Gazette*, and certify to the correctness of the above Balance-Sheet.

16th February, 1899.

ROBT. H. TODD,
A. JARVIE HOOD, } AUDITORS.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting of the branch was held at 178 Collins-street on the 29th March, the President, Dr. A. L. Kenny, in the chair. There were also present the following members:—Drs. Meyer, McGee, Noyes, Scott, Strong, Nihill, Anderson, A.V.M., Officer, McAdam, Henry, Hamilton, Halley, Plummer, Sexton, Martell, Stawell, Bennie, Loughnan, Willis, Armstrong, Nyasay, Thomson, Newman, and Finlay.

THE PRESIDENT read letters from Professor Lannelongue of Paris, and Dr. Crivelli, of Melbourne, with reference to the forthcoming International Medical Congress, to be held in Paris in 1900. He also announced that he had been appointed to act with Sir Thomas Fitzgerald, F.R.C.S.I., and Dr. Crivelli as a member of the Australian Committee formed for the furtherance of the Congress.

Dr. MCADAM, by permission of the President, drew attention to the necessity which existed for adopting measures to prevent members of the profession in Victoria from taking office in connection with the so-called Prudential Benefit Societies, which certain lay persons were endeavouring to establish. He mentioned the action of the Sydney and New South Wales Branch in this matter as one to be imitated here, and expressed a hope that two delegates would be at once appointed to co-operate with similar delegates from the other medical societies in the consideration of the proper action to be taken. The PRESIDENT moved the suspension of the Standing Orders, which was carried. Dr. FELIX MEYER then proposed that the President and the Hon. Treasurer should be appointed to represent the branch on the conjoint committee. This was unanimously agreed to.

THE PRESIDENT next referred in sympathetic terms to the death of Dr. C. E. Goodall, for some time representative of the Branch on the Council in London, and he moved, and Dr. Henry seconded, that letters of condolence be sent by the Hon. Secretary to the wife and father of the deceased member. The motion was carried.

THE PRESIDENT then called upon Dr. Noyes, who described and exhibited a very interesting series of skin cases. On behalf of members the President thanked Dr. Noyes.

Dr. STAWELL opened a discussion on the subject of Summer Diarrhoea in children, dealing with the pathology of the affection. His remarks were listened to with evident interest. He was followed by Dr. Officer, who handled the treatment of the disease in a comprehensive and masterly fashion.

Dr. HENRY called attention to certain bacteriological conditions in the blood of patients suffering from Summer Diarrhoea, of which no mention had been made by Dr. Stawell. In some cases he understood streptococci and staphylococci had been found. He was himself much interested in certain features presented by patients in consequence, as he believed, of the severe drain of serum. He thought the thermometer ought not to be applied to the axilla but to the mouth or rectum if reliable indications were desired. He was much surprised that Dr. Officer had made no allusion to the value of intestinal antiseptics. In various text-books much stress was laid upon their use, and he was himself persuaded of their value.

As the hour was now late it was resolved on the motion of Dr. McAdam to adjourn the discussion to the next monthly meeting.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE monthly meeting of the Branch was held on March 30th, 1899. Present: The President (Dr. Swift), Drs. Symons, London, Borthwick, J. A. G. Hamilton, Gunson, A. A. Hamilton, Sprod, Corbin, Morgan, Poulton, Gregerson, J. Evans, Marten, H. H. Wigg, Chapple, Lermite, Sweetapple, Giles, Todd, Gault, T. K. Hamilton, Michie. Professor Watson, and the Hon. Secretary (Dr. W. T. Hayward). Dr. Ernest Borthwick was present as a visitor, and the President of the Central Board of Health (Dr. Whittell) at the invitation of the Council.

LIVING EXHIBITS.

Dr. T. K. HAMILTON exhibited:—

A Case of Carcinoma of the inferior Turbinate. A man, aged 66, presented himself for treatment on Feb. 16th, having been troubled for some months with obstruction of the right nostril, and for the relief of which he had been taught to pass a bougie. On examination the nostril was found quite blocked with a friable mass growing entirely from the inferior turbinated body, and which bled easily on being touched with a probe. It projected through the choana posteriorly as a greyish enlargement of the same bone, and was apparently unconnected with any of the surrounding parts. There was no enlargement of neighbouring glands to be found. The whole mass, which is very large (exhibited), was removed with the forceps as it could not be caught in the loop of the snare, and the surface afterwards curetted thoroughly until the bone was left quite bare. There was a good deal of hemorrhage at the time, but only slight oozing afterwards. No evidence, either before or after removal of the growth, could be obtained of invasion of the neighbouring sinuses. Transillumination of the maxillary sinus revealed a slight relatively less luminous sub-orbital crescent, but as this condition still remains unaltered it may be accounted for by the abnormal thickening of the external wall of the nostril causing an intra-nasal shadow, and the absence still of a decided "umbra" is against involvement of or recurrence in this sinus. Dr. Cavenagh-Mainwaring reports the growth to be a columnar-celled carcinoma, that has been irritated, composed of masses of columnar epithelium and profuse round-celled infiltration. Alkaline washes and Ichthylol 50% in vaseline and this latter subsequently preceded by the application of 40% solution of Supra-renal extract, has been the local treatment since the operation. The supra-renal extract—one of our best and most recently discovered vaso-constrictors—has been found, according to Mullen, to greatly lessen secondary swelling and in some unknown manner kindly influence more rapid healing.* Velich also has shown that ischaemia of malignant growths, such as sarcomata, can be induced by the same application.† There is up to the present, no sign of any re-growth. The nostril is still quite free; there are no eye symptoms, beyond slight epiphora (probably from some obstruction of the nasal end of the lachrymal duct) the vision and visual field are normal, this latter taken along with absence of pain or contamination of neighbouring glands—for Maisonneuve states that the submaxillary glands do not enlarge until the antrum is involved‡—and the transillumination observations

* "The clinical observations on Use of Extract of Supra-renal Capsule in Operations within the Nasal Chambers." International Clinics. January, 1896.

† Wien Med. Blätter, No. 45, 1897.

‡ Gazette des Hôpitaux, 1865, p. 531.

already referred to, all point to a non-recurrence in or near the original site of the growth.

Primary carcinoma of the nasal cavity is of such rare occurrence that Cornil and Ranvier assert that there have been no well-authenticated cases of such recorded, but a carefully tabulated list of 30 cases by Bosworth* is ample proof that this statement is incorrect. From the investigations of this latter observer intra-nasal malignant growths have their origin most frequently in the upper and narrower parts of the nose, and usually require the radical operation for their complete removal. This case now exhibited is, therefore, one of the rarest clinical developments of intra-nasal malignancy, as the growth is apparently not only a primary one, but has its origin in the lower part of the nostril, and consequently it has been possible to effect, so far as we can see at present, a complete removal *per vias naturales*. As to the prognosis. This must necessarily be extremely grave. Recurrence in intra-nasal carcinoma is a rule to which recorded cases do not furnish any exception. The age of the patient would make recurrence more probable still, inasmuch as the disease has been found to run a more rapid course when it develops late in life.

Dr. T. K. HAMILTON exhibited the following :—

1. *A large mass of Post-nasal Adenoids removed from a woman aged 33 years.* The patient came complaining of increasing deafness especially in the left ear. On examination the following conditions were found: In the right nostril there was moriform hypertrophy of the inferior turbinate. In the naso-pharynx a large mass of adenoids, and in addition well-marked enlargement of the adenoid tissue of the upper and posterior lip of each Eustachian tube, but no growths from either fossa of Rosenmüller; in fact, these fossæ were only represented by a narrow slit owing to the hypertrophy of the walls of the orifices. An interesting abnormality of the soft palate also was discovered. At the apex of the triangle formed by the palatoglossus and pharyngeus muscles there was a perforation opening into the sinus which extended quite 1.50 c.m. into the soft palate. This is probably a congenital condition. Lastly there was some enlargement of the lingual tonsil. So the greater part of the pharyngeal lymphatic ring participated in the adenoid hypertrophy. Both ears showed evidences of middle ear catarrh, the membrane tympani being markedly indrawn, the manubria retracted and adherent at the umboes to the tympani wall, and on the left side there was a line of exudation visible which dispersed on inflation of the cavity. The post-nasal growth (exhibited) was removed *en masse* with the largest-sized Gottstein-Beckmann curette, was found to weigh exactly three grammes, presents the four anterior-posterior ridges on its surface such as we usually see in the adenoids of this region in early life, and is of soft consistence, not having undergone much fibrous degeneration, hence its large size and easy removal. The point of chief interest in the case is the very large size of the adenoids in an adult of 33 years. Probably there had been a subacute inflammation of the growth soon before the patient came under observation causing the serous inflammation which was present of the left middle ear, for this cleared up and the hearing improved after the operation. Attention has been drawn by Mounet† to the not infrequent occurrence of acute and subacute inflammation of post-nasal adenoids in adults, a condition

which has been observed in any age up to 55. Delstanche* has made similar observations, and Janquet‡ has operated on a woman of 45 years for a voluminous adenoid growth.

2. *Drawings of Two Cases of Laryngeal Growths (A) Angiomata of the Vocal Cords in a Female aged 23.* The larger growth sprang from the right cord at the junction of the anterior and middle third and partly from its free border and upper surface, thus interfering somewhat with complete adduction. The growth on the opposite cord was much smaller, somewhat further back, and entirely on the upper surface. The larger growth was easily destroyed with the galvano-cautery, and the patient's voice was soon restored. The smaller one was treated by applications of Lugol's solution, but, it having failed to influence it, a 20 per cent. solution of Sulpho-ricinate of Phenol was applied at intervals of three days, and after the third application not a trace of the growth was to be seen. Doubtless the larger growth would have been easily removed by the application of the same medicament. Sulpho-ricinate of Phenol—originally introduced into the realm of therapeutics by Ruault—has now come into very general use for various conditions of nasal, pharyngeal, and laryngeal diseases, but this is the first opportunity that has been afforded me of using it for the removal of a vascular growth. According to Heryng† you must be sure that your solution is pure. All preparations that are not quite transparent, of dark brown colour, or that form a precipitate, must be rejected as impure. They contain water, and therefore cause pain when applied to the mucous membrane. That known as "the French preparation" is said to be the most reliable. From 20 per cent. to 40 per cent. is the strength of solutions used. (B) *Fibromata of the Cords.* The growths were in the same position as the Angiomata, a large and a smaller one on each cord, only the larger one sprang partly from below the free border of its cord. They were destroyed by one application of the Galvano-cautery.

3. *Dundas Grant's Apparatus for applying Vibratory Massage to the Spine in Sclerosis of the Middle Ear.*

4. *A new Shape of Artificial Eye.* Müller Söhne, of Wiesbaden, have recently introduced this new prosthesis which promises to supersede the older shapes in many cases requiring artificial eyes. It is made of the same material as former patterns—enamel—but differs from them in having its posterior surface only very slightly cupped, and the margins, instead of being thin and sharp, are gently rounded off and gradually merge into the shallow depression which constitutes the central cup. The space between the anterior and posterior surfaces is evidently hollow, as the weight of the whole does not seem to exceed that of one of the present-shaped eyes of the same size. These modifications in shape will probably recommend this newer prosthesis as possessing certain advantages over those eyes now in use. For example: The shallow cupping will not allow of the formation of a vacuum in the socket, which, by the conjunctival oedema thereby induced, so often causes troublesome irritation; or, again, the smoothly rounded-off edges will make the eye more easily worn, as it will not press so much on the caruncle or fornix, and this, in turn, will, by diminishing friction, preserve the enamel from becoming so soon roughened; or, once more, it seems

* Diseases of the Nose and Throat, p. 453.

† Revue Heb. de Laryng., Jan. 22, 1898.

* Procced. Soc. Belges d'Otol. et de Laryng., 1896.

† Ibid., 1898.

‡ Therapeut. Monats., Mar. & May, 1896.

probable that this newer shape will better correct the unpleasant depression so often seen above an artificial eye caused by the position of the lid. (For an addendum to these remarks see page 156).

Professor WATSON showed :—

1. *Bony ankylosis of an upper bicuspid*, removed by a leading Ballarat dentist from a woman, *æt.* 37.—Dr. Pinnock.

2. *Cystic degeneration of the chorion*. The disease must have commenced shortly after conception, before the advent of the placenta, to have attained such unusual dimensions. From a 1-para, *æt.* 26.—Dr. Corbin, *senr.*

3. *Vermiform appendix* from a girl, *æt.* 18. It pointed N.N.W., and was about to perforate into the cœcum, to the outer side of which it was adherent.—Mr. Cook.

4. *Adhesive form of pelvi-peritoneal tuberculosis*, which simulated intra-ligamentous myoma in a woman, *æt.* 39, who suffered from metrorrhagia, and was cured by vagino-abdominal hysterectomy.—Dr. O'Sullivan.

5. *Encapsulation of adnexial tuberculosis*, which mimicked a tumour of the appendix. It was removed from a girl, *æt.* 18, who having suffered from droopy and ataxia of the menses, developed a pelvic tumour and persistent amenorrhœa. In former times such collections, while still fluid, were probably tapped as ovarian cysts. The capsule is salutary, inasmuch as it tends to prevent systemic infection, but it doubtless retards absorption of the fluid which dries in as caseous material or organises in part, into a cartilaginous form of fibrous tissue, which is apt to mislead one into diagnosing a dermoid, fibroid, or a tumour connected with the appendix, as in the present case. A tag of adherent omentum traverses the caseous material, from which, none the less, it is shut off by a dipping-in of the capsule—just as the ligamentum teres is excluded from the synovial cavity of the hip-joint by a synovial investment. Patient recovered from the operation, but has developed phthisis.—Dr. Lendon.

6. *Double pyo-salpinx* from a woman, *æt.* 25, with a gonorrhœal history. The left abdominal ostium was still patent, and communicated with a pus cavity walled in by the pelvic viscera cemented together by organised exudate, which also formed a collar around the distal end of the tube. The posterior wall of the cavity can be deduced from another specimen in the removal of which, by the ordinary method, a very skillful operator unwittingly tore away that portion of the meso-sigmoid in which the inter-sigmoid pouch is situated; he also tore the infundibulo pelvic ligament, without, however, rupturing the ovarian artery. Dr. Hamilton can tell you that within the last week he has seen two cases which could not have been left without a gauze drain had the accepted method of separating adhesions and delivering from behind and below been adhered to. One is also apt to think that an ovarian abscess or the tube itself has burst, when the pus splashes suddenly up. None of the above accidents occurred during the removal of this instructive specimen.—Dr. Thring.

7. *Group of myomata*, seven in number, ranging from the size of a cherry to that of a lawn tennis ball. They were all more or less sessile, and therefore presented no difficulty in their removal by the abdominal route, from a unipara, *æt.* 37.—Dr. Way.

8. *Constellation of tumours*, the central one which weighs 1 lb. 1½ oz., and developed in the posterior left uterine wall. The remaining tumours (6) projected from the fundus or were imbedded in the anterior wall.

Removed through the abdomen from a German lady, *æt.* 25, who had been married three months, and had recently begun to suffer from left sacral pain, frequent desire to micturate, but no metrorrhagia, finally intestinal obstruction. The incisions were all made transversely, and the excavation cavities closed from the bottom with buried raw tendon. Next morning a ten weeks foetus with evidence of having been harpooned in the right deltoid was found in the bed. It will be interesting to notice what will happen when she next becomes pregnant. She last menstruated fourteen days before marriage.

9. *Bilobate myoma* like a thyroid gland. It was removed by anterior colpotomy combined with transverse incision of the anterior wall of uterus from a virgin, *æt.* 32, who suffered from an irritable bladder and menorrhagia. The left utero-ovarian arch of vessels ran across the left lobe of the tumour, and was placed under visual control in the end of the incision and avoided. The right lobe of the tumour was hooked with Worrall's uterine vulsellum and the tumour stripped and delivered. The resulting cavity, which impinged on the uterine cavity without actually communicating with it, was closed with interrupted sutures of raw tendon introduced by the aid of an electric headlight, with a trachelorrhaphy needle made by McLennan, of Sydney, to the order of Dr. Worrall. The utero-vesical peritoneal edges overlapped in consequence of redundancy caused by removal of the growth. No sutures were, therefore, required to close the peritoneum.—Dr. Way.

10. *Large polyp*, like a purple fig, which was removed from the uterine cavity of a woman, *æt.* 55, who thought she had a cancer.—Dr. Way.

11. *Tubal abortion* in which the resulting hæmatocele, excited inflammatory reaction, viz.:—adhesions, pyrexia and rigors. Clinging to the fimbria ovarica of the left tube is a damaged mole, close to which is a hydatid of Morgani peeping through a crack in the blood-clot, and at first sight very suggestive of an amniotic sac. On the alternate (right) side is a small ovarian cyst, the size of a billiard ball. It was so obscured in blood-clot that at the operation it was attacked straight away as the culprit tube, and removed. The left tube which had so safely ejected its unwelcome guest, and now with open mouth, clamoured for mercy and freedom from its bloody coat was (with its ovary) replaced by a good solid pedicle with an orthodox supplementary ligature. The patient, a recently married woman, *æt.* 22, was saved, although her convalescence was marked by rigors and high temperatures.—Dr. Hagenauer (Sale).

12. *Retention of a mole in the left tube*, which had ruptured and filled Douglas' Pouch with blood-clot which was roofed in by the sigmoid flexure and the great omentum. The adnexa of the opposite (right) side were stripped of adherent clot and left intact. From a young married woman, *æt.* 24.—Dr. Marten.

13. *Sarcoma* which grew from the left side of the sacrum and blocked the pelvis of a man, *æt.* 24, who often having been treated for a pain in the left foot and afterwards in left knee, was seized with intestinal obstruction after taking a dose of salts. The tumour was hollowed out through an ileo-inguinal incision, thus enabling the rectum to empty itself. A second tumour the size of a kidney was found beside the right ureter in the lumbar region. Removal was, of course, impossible, and the patient made his will and died of pain and exhaustion.—Dr. Way.

14. *Pyloric Cancer* with a Murphy's button still in situ. Posterior gastro-jejunostomy was performed, but before clamping the button a peptonised meal was

poured into the jejunum through the male half of the button. The meso-colon was perforated to the left of the colica media vein, in order to insert the button proximally to the growth which involved more than the pylorus. Patient had lost so much ground waiting for a cool day to be operated on that he became too weak to undergo so serious an ordeal and died within seven hours. To save time, the half button in the stomach was pushed through a small incision and clamped without the usual preliminary purse-string. This idea originated with Dr. Charles Ryan. Two stitches were, however, found necessary, as in a recent successful case of his, to close the end of the incision towards the lesser curvature.—Dr. Way.

15. *Right iliac cryptorchism*, complicated with inguinal hernia, from a student, *et. 18*. Although the veins were removed, and the vas straightened out and the testicle inverted (turned topsy-turvy as Mr. John Wood used to say), it was impossible to get it into the scrotum, so it was removed, and Bassinis' operation with chromicised tendon performed.—Dr. Way.

16. *Remains of an omental cyst and matted omentum*, from a man, *et. 19*, with right iliac cryptorchism complicated by an omental cyst in the inguinal canal, which latter was otherwise occupied by matted omentum, mistaken by the patient for a testicle. When the omental cyst burst I thought it was a hydrocele of the cord. The veins were excised, a loop in the vas straightened out, the testicle inverted and brought almost to the bottom of the scrotum and sewn there, but without any parietal tunica vaginalis to cover it. It became very swollen for a few days, and then began to shrink. Bassinis' operation was performed. I don't know whether the testicle will be of advantage to him.—Dr. Way.

17. *Ovarian hernia* in a multipara, *et. 35*. Right tube, ovary and ovarian varicocele, with fundus of a hernial sac which many years of intermittent pressure from a truss, had transformed into a bursal sac with very thick walls, which, at the operation, looked startlingly like a pouch of herniated bladder. The round ligament was included in the three outermost sutures of those reforming the posterior wall of the canal in Bassinis' operation.—Dr. Worrall.

18. *Pedunculated tumour* growing from the sub-mucosa over the second ring of the trachea, from a man, *et. 36*, who died of suffocation.—A. Watson.

19. *Cancer of the tongue* removed from a woman, *et. 82*.—Dr. Hamilton.

20. *Portions of round ligaments* removed in the Alexander operation by a first-class operator, who objects to opening the inguinal canal on the score of hernia. As his results are just as good as those of other operators, I suppose it does not matter either way. One must not forget, however, that in the modern operations for hernia the canal is opened to cure and not to encourage the formation of a hernia. Interesting also is the fact, that each of these removed portions of the round ligaments carries a minute pouch of peritoneum at its pelvic end.—A. Watson.

21. *Microscope specimen of the coccidia of rabbits*.—*Vet. Surg. Desmond.*

22. *Kenny's trephine instrument*, the original of which is in the possession of Dr. Clubbe, of Sydney, and is pictured in the January number of our *Gazette*.—*Thos. Gaunt & Co. Melbourne.*

23. *Photographs of Pean, Doyen, Oharoot, Pasteur, etc., etc.*—*Dr. Angus Johnson, Paris.*

The PRESIDENT introduced the subject of the new Health Act, and alluded to several points in which he considered it defective. A discussion ensued in which Drs. Marten, London, Hayward, Sprod, and Gault

took part. Dr. Whittell exhaustively reviewed the remarks of the previous speakers. Dr. London moved and Dr. J. A. G. Hamilton seconded a motion, that: "The Council be requested to draw up resolutions on the Health Act, and submit them to the next meeting of the Branch." Carried.

PROCEEDINGS OF OTHER SOCIETIES.

MEDICAL SOCIETY OF QUEENSLAND.

THE 147th General Meeting was held on April 4th, 1899, in the Society's rooms. Present:—Dr. Hardie, (President), Drs. Robertson, Gibson, Wheeler, Carvoso, Orr, Dixon, Love, Davidson, Byrne, and Turner.

H. M. Lightoller, L.R.C.P. Lond., M.R.C.S. Eng., was proposed for membership by Dr. Hardie, seconded by Dr. Wheeler.

THE PREVENTION OF TUBERCULOSIS.

Dr. TURNER, in opening the discussion, remarked that this was a subject which was attracting much attention at the present time. Tubercular diseases caused an enormous mortality all the world over. In Queensland they were, according to the Registrar-General, responsible for one-tenth of the deaths from all causes. Of the various forms of these diseases, pulmonary phthisis caused the great bulk of the deaths, and was from the point of view of aetiology by far the most important. There were various predisposing causes of tuberculosis, such as heredity, deficient sanitation, life or work in ill-ventilated buildings, dusty trades, influenza, and other lowering diseases, etc. These were to some extent preventable, but to some extent also would always continue to exist. By themselves they could never cause tuberculosis, the one essential cause of which was infection by the tubercle bacillus. Furthermore, he believed that there was no such thing as absolute immunity. By sufficient exposure to infection the most healthy might contract tubercular disease. There were two sources from which the bacillus might be derived: (1) the milk and meat of tuberculous cattle; and (2) the sputum of phthisical patients. While the former was a real danger, the latter was, in his opinion, a greater danger. For prevention the first cause must be met by the elimination of tuberculosis from cattle, especially dairy cattle. This was scientifically an easy matter, the difficulties being financial. With regard to dairy cattle it should be insisted on, milk being, in his opinion, a more dangerous means of infection than meat. Boiling the milk was an absolute preventative, but would never become universal. The prevention of infection from sputum was the main *crux* of the question. A consideration of the myriads of bacilli expectorated daily by a single phthisical patient was enough to show its importance. But in attaining this end there was need of caution. Such crude proposals as the compulsory segregation of phthisical patients were to be deprecated. Even notification was at present inadvisable. It must be remembered that cases of early phthisis were frequently earning a livelihood. Notification would lead to evasion, concealment, neglect to take medical advice, and public opposition, which would intensify the existing danger. There remained only one resource. The public must be educated as to the danger, and means of preventing infection. Compulsory hospitals or detached wards of hospitals, properly constructed, were beneficial in diminishing infection as well as benefiting patients. Early cases were curable, and the

climate of Queensland was eminently favourable to the open-air treatment of the disease. The majority of cases would, however, probably continue to be treated at home. These should be taught that the sputum when fresh, unless transferred directly from mouth to mouth, was harmless. Its viscosity was a perfect protection. The whole danger arose from the dried sputum, which was inhaled as dust. Expectoration should be performed into suitable vessels, and these with their contents should be boiled. Handkerchiefs should not be used as receptacles, but if used should be kept moist until boiled. Expectoration in the open streets was a comparatively trivial danger, as the germicidal power of a Queensland sun could be trusted to deal with it in most instances. But in public conveyances and dwelling-houses it was a grave evil. Among Kanakas in Queensland one-half the deaths were due to tuberculosis. This was discreditable to the health administration of the colony. He had no special knowledge of the conditions under which these Kanakas lived, but would predict that by periodical inspection, isolation of early cases, and disinfection and adequate ventilation of sleeping houses, their mortality from tuberculosis might be reduced to a much smaller fraction. In conclusion he suggested that some practical steps be taken for the education of the public in the prevention of tuberculosis.

Dr. ROBERTSON said that it was difficult to get people to take precautions. He thought that in hospitals it was important to grade the cases, and not mix early cases with those that were advanced. He had seen Kanakas in a dying condition from advanced phthisis, who had never been previously seen by a medical man. This was due to the burden of medical attendance being imposed on the employer. Disease was neglected in the early stages, and these cases became a danger to the community, which could only be removed by periodical compulsory medical inspection of Kanakas. In case of persons following occupations it was specially difficult to provide for expectoration according to hygienic rules.

Dr. GIBSON said that there were really only two predisposing causes of tuberculosis: (1.) An increased susceptibility due to heredity. When this was present in a high degree, it was impossible to prevent the subjects becoming infected if they lived in towns; (2.) Anything lowering general vitality, a healthy man in good condition might be regarded as immune. With regard to cattle he strongly agreed with Dr. Turner. He did not believe in segregation nor notification of phthisis. Education of the public was a very difficult matter. Most people did not care about infection, unless they suffered themselves; witness the prevalent carelessness with regard to scarlet fever convalescents. He thought with Coghill, that consumptives should be clean shaven. Sputum drying on the beard or moustache, must be a source of danger. There was a tendency at present to underrate the value of climate in treatment; a tendency with which he did not agree. In some climates, such as this, an open air life is possible all the year round. He did not believe that there was a better climate anywhere than might be found in Queensland, if the patient would live in the open air. Unfortunately patients coming out here bring with them habits of living with closed doors and windows whenever the air was in the least cool. Buildings which had been lived in previously, possibly by tuberculous subjects, ought to be disinfected. Healthy upper respiratory passages were important for getting the full advantages of fresh air. He believed it would be found that Kanakas suffer from tubercle

only when living near towns, or herded together in small sleeping rooms.

Dr. WHEELER thought it would be much pleasanter for a consumptive, whatever occupation he might be engaged in, to use a properly made pocket sputum flask than a handkerchief. It was important to separate early cases in hospitals from advanced sufferers, as nothing was more depressing than for the former to watch the progress of the disease in the latter. He considered that the sputum was the main point of danger in infection.

Dr. LOVE said there was little doubt as to the prevalence of the disease, and quoted Dr. Springthorpe's summary: "A disease which according to Hirschberger kills one-fourth of all children dying under one year old, is responsible according to Kamsome for one-half of all deaths during marriageable ages, is common according to McLachlan and others among the aged, and causes in all some 16 per cent. of the total mortality in civilized lands—merits special attention at a Medical Congress." "The disease was rife, too, in Australia, especially in the large cities." Older practitioners like the late Drs. Bancroft and Hobbs had told him that twenty years ago it was a rare thing to find phthisis in a native-born resident, but now he believed that the cases contracting the disease in the colony far outnumbered the imported cases. One point in the statistics of tubercular disease should, however, be received with some caution—that was the cases which were certified as dying from *Tabes mesenterica*. He had made a number of post-mortem examinations of young children dying at the Children's Hospital of what clinically resembled *Tabes mesenterica*, but had failed to find tubercle bacilli in the enlarged mesenteric glands. He felt sure that a number of cases were certified as *Tabes mesenterica* where the abdominal glands were enlarged from causes other than tubercle. The mortality among Polynesians also tended to swell the Queensland figures, but it was satisfactory to see that the death-rate among Kanakas as well as among white colonists was decreasing. Again, the recognition of the pulmonary cases was more easy and certain now as he imagined there were few general practitioners who did not examine the sputa for bacilli. He referred to a suggestive paper in the *Lancet* in which a parallel had been drawn between Leprosy and Tubercle, where it was stated that in the middle ages Leprosy held the same sway that Tubercle does now. He compared the two diseases in the morphological similarity of the bacilli, in the slow incubation period and in the similarity of lung involvement. Were they justified in the assumption that the race would gradually in course of time become more immune to tubercle as had in all probability been the case with Leprosy? He laid stress on the importance of having a clean milk supply, and believed that houses where consumptives had lived played a large part in the dissemination of phthisis, and advocated the compulsory disinfection of such houses with chloride of lime, as recommended by Delepine. In face of all this what had been done in this colony towards stemming the tide of the disease? Very little. The Central Board of Health had repeatedly recommended the use of tuberculin among dairy cattle, but so far without success. The General Hospital had supplied their cases with the leaflet issued by the Australian Health Society, and he thought that the Board of Health might provide all practitioners in the colony with these leaflets for distribution to their cases. Lastly, sanatoria had been established at Dalby and Roma where early cases were received on the recommendation of the Government Medical Officer in Brisbane.

However, there was much that might be amended in the control of these places. The climate of Brisbane, in common with all the coastal towns, was most unfavourable for phthisis especially in the summer months. They all regretted that the hopes which had centered in tuberculin had not been realised, and expressed his belief that its failure was largely attributable to the mixed infections occurring in cases of phthisis, most of which died from septic exhaustion. He concluded by quoting the resolutions approved by the Dunedin Congress, which if given effect to would go far to check the spread of the scourge.

Dr. BYRNE said that the great source of infection was from sputum. Until the public were educated into understanding this, little good could be done. Cattle were a comparatively small source of danger. He agreed with Dr. Gibson, that attention to proper channels of breathing was important.

Dr. HARDIE, after alluding to the facts that the death-rate was decreasing in Queensland, especially so among the Kanakas, desired to refer only to one point, namely, that whereas in the early history of the colony, medical men met with phthisis as an imported disease, it was now seen largely as a disease contracted in the colony. Two arguments might be advanced in support of this statement. Firstly, the number of patients who have lived in Queensland for some years is steadily on the increase. In 1887, 72 per cent. of the cases of death among the white population had been in the colony over five years: in 1892 the percentage rose to 83, and in 1897 it was as high as 95, so that at the present time fully 9 out of every 10 patients have been in the colony over five years. He did not mean to say that all these necessarily contracted the disease here, because as a matter of fact we knew that many cases are ill, from first to last, more than five years, still we may fairly take it for granted that the great majority of these contracted their illness in Queensland. Secondly, the disease is spreading among white native-born Australians. In 1887, these contributed 9 per cent. towards the death rate from phthisis in Queensland, in 1892 the per centage rose to 12, and in 1897 to 20; so that the rate of deaths from phthisis, among native-born Australians, has doubled itself in 10 years, and now forms about one-fifth of the whole. This proportion is of course small when we remember that more than half the population is native-born, but we must bear in mind that many of these are under 20 years of age, and have not arrived at that period of life when phthisis usually develops. He believed that these figures showed clearly, that phthisis as such with them was not now an imported disease, and that if we desired to stamp it out we must use as strenuous efforts as they are using in the old country, and probably in the same direction. He agreed with Dr. Turner, that this can only be done through the agency of the public. Four years ago resolutions were passed at the Brisbane meeting of the Science Association, urging the Governments of Australia to deal with the matter. Resolutions of a similar nature were also passed at the Congress meeting in Dunedin, but with what results in either case? Nil. The reason is that they did not strike home to the public. That is the way, and the only way, to do any good, and he asked the members to express their opinion how this can best be done.

After several members had expressed their views on the proposal to hold a public meeting to discuss the prevention of tuberculosis, Dr. Turner gave notice of a resolution to that effect, to be moved at the next meeting.

NEW SOUTH WALES MEDICAL UNION.

The sixth Annual Meeting of the New South Wales Medical Union was held at 121 Bathurst-street, Sydney, on Wednesday evening, 29th March, 1899.

Present: Drs. P. J. Collins, G. A. Marshall, P. E. Muskett, G. Lane Mullins, J. Adam Dick, Gordon MacLeod, A. A. Cohen, M. Gledden, Sinclair Gillies, C. U. Carruthers, W. H. Crago, F. H. Quaife, W. A. West, Samuel T. Knaggs, W. H. Coutle, A. J. Brady, T. Fiaschi.

Dr. QUAIFFE in the Chair.

The Hon. Secretary (Dr. MULLINS) read the minutes of the preceding Annual Meeting, which were confirmed.

Dr. MULLINS read the Annual Report, which was adopted:—

"SIXTH ANNUAL REPORT, 1898-99.

"The Council has the satisfaction of being able to report another successful year in the progress of the Union. Two hundred and seventy-one members paid the annual subscription, as against two hundred and fifty-six for the previous year; three of these who were elected just before the close of the year 1897-8 also paid the subscription for that year. Twenty-one new members were elected, and completed their membership under amended Rule 6; while eight members forfeited their membership through non-payment of subscription, and one member resigned.

"The Council has to record, with regret, the death of one member, the late Dr. T. Primrose Anderson, of Kiama.

"The local Hon. Secretaries have continued to evince interest in the Union, and are deserving of the thanks of the members.

"During the past year several matters of importance, affecting members, have been brought under the consideration of the Council:—

"(a) A member was committed for trial for manslaughter by a Coroner's jury, in a case where the patient died from hæmorrhage after curetting. The Council, after enquiry into the facts of the case, decided to assist the member both pecuniarily and otherwise, but, owing to their being no evidence to support the charge, the Attorney-General declined to file a bill. The practitioner who administered the anæsthetic, also a member of the Union, was also put to considerable legal expense, which was defrayed by the Union.

"(b) A country member was threatened with an action, in a case where the death of the patient took place during the removal of the placenta in a four months' abortion. The case was considered by the Council, and then referred to a sub-committee of two, who gave the member valuable advice. The result was that the case was dropped.

"In several other instances members have sought the advice of the Council in various matters.

"The Treasurer's statement shows the amount of funds in hand at the end of the financial year to be £1,052 14s. 10d., an increase of nearly £240 for the year, notwithstanding the fact that the calls upon the funds were the heaviest in the history of the Union. The receipts from all sources amounted to £337 7s. 9d., and the disbursements to £100 8s. 6d.

"Early in the year the Council appointed Mr. C. W. Grigson assistant to the Secretaries, at an honorarium of ten pounds per annum, and it was at the same time decided to pay five pounds per year to the *A. M. Gazette* as rent for the use of the Editor's Library as an office for the Union.

"Five Council meetings have been held during the year. The number attended by each member was as

follows:—Dr. Brady 5, Dr. Crago 5, Dr. Knaggs 5, Dr. Mullins 5, Dr. Muskett 5, Dr. Fiaschi 4, Dr. Quaife 4, Dr. Carruthers 3, Dr. Collins 3, Dr. Coutie 3, Dr. Jamieson 3, Dr. Faithfull 2, Dr. Foreman 2, Dr. Hood 2, Dr. Wood 2, Dr. Jenkins 1.

"F. H. QUAIFF, M.D., Chairman.

"A. JARVIE HOOD, M.B., } Joint

"G. LANE MULLINS, M.D., } Hon. Secs.

"W. H. CRAGO, L.R.C.P., &c., Hon. Treas.

"121 Bathurst-street, Sydney,

"March, 1899."

The Hon. Treasurer read the statement of receipts and expenditure for the year ending February 28th, 1899, and in moving its adoption he (Dr. CRAGO) mentioned that although the statement showed a balance only of £1,052 14s. 10d., the subscriptions that had been received for the current year brought the balance (at the time of the meeting) up to £1,276 10s. 7d. The adoption of the statement was duly seconded and carried.

supply members proceeded against at law with funds to meet legal expenses, or should it be registered as a Friendly Society, or be incorporated as a public company?

After some discussion, it was proposed by Dr. KNAGGS, and seconded by Dr. HANKINS, "That a committee, consisting of the Chairman, the Hon. Secretary, and the Hon. Treasurer, be appointed to make inquiries as to the advisability of bringing the N.S.W. Medical Union under the Friendly Societies Act, or incorporating it into a public company, and when such information had been acquired to communicate it to the Council." Carried.

Dr. GORDON MACLEOD asked whether it would not be feasible, in view of the Medical Union becoming a fairly wealthy Society, it could be formed into a Medical Accident and Sickness Assurance Society for the benefit of its members, similar organisations existing and flourishing in England?

The Hon. Secretary (Dr. MULLINS) pointed out that their profession in the colony was as yet not sufficiently

NEW SOUTH WALES MEDICAL UNION.

STATEMENT OF RECEIPTS AND EXPENDITURE FOR THE YEAR ENDING FEBRUARY 28, 1899.

	£	s.	d.		£	s.	d.
To Balance from previous year ...	814	9	10	By Dr. T. M. Martin (Legal Expenses) ...	20	4	0
" " Petty Cash ...	0	5	9	" Dr. T. A. Green ...	42	0	0
" 274 Subscriptions received, at 21s. ...	287	14	0	" Printing ...	13	13	0
" 21 Entrance Fees, at 21s. ...	22	1	0	" Legal Opinion ...	3	3	0
" Amount received for exchange ...	1	17	6	" Assistant Secretary ...	10	5	0
" Interest received ...	26	15	3	" Rent (Office) ...	5	0	0
				" Postage Stamps ...	4	6	6
				" Exchange ...	1	17	0
				" Credit Balance ...	1,052	14	10
	<u>£1,153</u>	<u>8</u>	<u>4</u>		<u>£1,153</u>	<u>8</u>	<u>4</u>

Examined and found correct,

JOHN STEEL,

EDWARD T. THRING,

March 10th, 1899.

} Auditors.

WM. H. CRAGO,

Hon. Treasurer.

Dr. MULLINS directed attention to the fact that the funds of the Union were increasing, and it would be necessary for members to consider what steps should be taken, at once, or in the near future, to deal with such funds. The council desired to have an expression of opinion from members as to whether the funds should be allowed to accumulate until two or three thousand pounds have been secured, as the Union was at present managed, or should the annual subscription to members of long standing, or to all members alike, be reduced.

The discussion which followed was carried on by Drs. Crago, West, Coutie, and the Chairman. Finally it was resolved that the business of the Union should be carried on as it had been in the past until the funds accumulated still further.

Dr. MULLINS then desired the opinion of the meeting regarding the legal status of the Union. Should it remain as at present—i.e., an organisation merely to

numerous a body to start and carry on such an undertaking. He had gone into the matter, and arrived at this conclusion. Rather, he favoured the idea of approaching some well established assurance office with the object of being able to initiate a Medical Branch of such office with special terms and advantages which a large firm could offer.

The CHAIRMAN announced that as only the members of the retiring Council had been nominated, they were duly re-elected. Councillors (10): Drs. A. J. Brady, C. U. Carruthers, P. J. Collins, R. L. Faithfull, J. Foreman, S. Jamieson, E. J. Jenkins, S. T. Knaggs, P. E. Muskett, P. M. Wood. As Auditors, Dr. J. Adam Dick and Dr. H. H. Marshall had been nominated and elected for the current year. In concluding the business of the evening he moved a hearty vote of thanks to the Hon. Treasurer, Dr. Crago, and to the Joint Hon. Secretaries, Drs. G. Lane Mullins and A. Jarvie Hood. Carried by acclamation.

THE MEDICAL BENEVOLENT FUND OF NEW SOUTH WALES.

THE Annual Meeting of the Fund was held at the Royal Society's Room on Friday, 24th March, 1899, Dr. W. Chisholm in the chair.

The HON. TREASURER (Dr. Faithfull) read the financial statement, which showed that subscriptions amounting to £55 ls. had been received during the year, and assistance granted to the extent of £48. There is a credit balance of £125 13s. 2d. to commence the year with.

Dr. CRAGO proposed,—“That the existing Committee be re-appointed for the ensuing year.” Seconded by Dr. KNAGGS, and carried.

Trustees: Drs. Faithfull and Morgan Martin.

Hon. Secretary: Dr. F. W. Hall.

Hon. Treasurer: Dr. Faithfull.

Committee: Drs. Fiaschi and F. H. Quaife.

sincere gratitude with a promise of returning the amount advanced to her should she be so fortunate as to have it in her power to do so.

The third case was that of an old gentleman, formerly practising in Sydney, who, in consequence of paralysis and business misfortunes, was obliged to apply for help, though bravely attempting to get professional work. A small amount was advanced to aid him in his struggle, but I am sorry to say that after he had been assisted as far as the Fund allowed, he has been obliged to succumb to an unequal struggle and accept assistance from the State.

In conclusion, I would strongly urge upon the medical profession of this colony the advisability, or rather the duty of every medical man to subscribe to this Fund in order to help their less fortunate brethren whom an adverse fate has either for a time or permanently driven to the wall. Misfortunes, for which he has not himself to blame, may come to any man,

THE TREASURER IN ACCOUNT WITH THE MEDICAL BENEVOLENT FUND OF NEW SOUTH WALES.

		£	s.	d.
Balance in hand, 20th March, 1898	...	14	15	0
Subscriptions received	... ..	55	1	0

			£	s.	d.
Assistance granted	...	...	48	0	0
J. A. Thompson, printing	...	...	0	16	6
Mr. W. Green postage	...	...	1	3	2
Exchange on Cheques	...	...	0	7	0
Cheque Book	...	...	0	2	1
Balance in Commercial Bank, Bathurst-street Branch	...	...	19	7	3
			£69	16	0

	£	s.	d.
Balance to hand in Bank	19	7	3
„ in Savings Bank of N.S.W. ...	100	0	0
Interest from the 13th January, 1897, to 31st December, 1898	6	5	11
	£125	13	2

E. & O.M.
Audited—SAMUEL T. KNAGGS.
24th March, 1899.

B. L. FAITHFULL,
Treasurer.

REPORT OF THE HONORARY SECRETARY FOR THE YEAR 1898-99.

Mr. President and Gentlemen,—

During the past year the receipt of subscriptions has been fairly good, and the money received has been sufficient to cover the amount paid out in order to meet the necessities of those claiming relief, and to leave a balance of a few pounds in hand.

Relief has been given in three cases, all most deserving of aid. A case mentioned in the Honorary Secretary's report last year was a most unfortunate one, in which an old and worthy practitioner lost his sight, and in consequence has been utterly incapacitated for duty. Owing to the little help the Fund has been able to give, he and his family have been rescued from absolute penury.

Another was that of the widow of a medical man left, owing to the sudden death of her husband, for a time without means of any kind. She was enabled to stem the tide of her misfortunes, and has expressed

and in these cases it seems right that we should be ready and willing to give a helping hand. In order to do this a large subscription is not needed if every member of the profession will make a point of subscribing. I believe all are willing to do so, and recognise the good object for which the Fund is formed. But many are forgetful or will not take the trouble to send their contribution. The burden shared by many is light, and is capable of giving substantial aid by relieving much distress in deserving cases.

The following members have subscribed for the current year:—Drs. E. H. Thane, T. A. Green, W. H. Crago, O. P. B. Clubbe, E. T. Thring, A. E. Mills, A. M. Gledden, L. E. F. Neill, A. J. Brady, S. Jamieson, R. Pope, H. E. Lee, S. Gillies, E. J. Jenkins, E. G. Blaxland, W. Chisholm, F. W. Hall, F. Tidswell, T. Fiaschi, F. H. Quaife, G. A. Marshall, P. J. Collins, E. H. Binney, G. L. Mullins, H. L. Maitland, J. M. Gill, G. T. Hankins, G. S. Samuelson, T. M. Martin.

EASTERN SUBURBS MEDICAL ASSOCIATION (SYDNEY).

A GENERAL meeting of the members of the above Association was held at "Murong," Waverley, on March 21st, 1899, at 8.30 p.m. There was a good attendance of members, Dr. F. H. Quaise, vice-president, in the chair. The minutes of the preceding meeting were adopted. The following business of more than local interest was transacted:—

Election of President.—Dr. G. Lane Mullins, of "Murong," Waverley, was unanimously elected President of the Association for the remainder of the year.

A Local Lodge Question.—The Hon. Sec. was instructed to enquire from the Secretary of an Eastern Suburbs Lodge whether a certain city practitioner had been elected second medical officer to the lodge at sixteen shillings per member per annum, i.e., a rate of remuneration lower than the minimum local rate for such lodge, viz., eighteen shillings per member per annum.

A City Lodge Question.—The Hon. Sec. was instructed to reply to an enquiry from a city practitioner, who had reported that an Eastern Suburbs practitioner had been appointed second medical officer to a certain lodge at sixteen shillings per member per annum, i.e., a lower rate per member per annum than the minimum, viz., eighteen shillings, rate for the Eastern Suburbs lodges. The reply sent by the Association was, "That, as the lodge in question had been found to be defined as a city lodge, the Eastern Suburbs Medical Association had no jurisdiction." It was also stated in the meeting, that, under such circumstances as the foregoing, suburban practitioners were within their rights, and, in order to remedy the matter, it behoved the city practitioners to raise the city lodge rates to the suburban rates.

Election of Councillors of the N.S.W. Branch British Medical Association.—A letter was sent to the Hon. Secs. of the North Sydney Medical Association, and to the Western Suburbs Medical Association, as follows:—"The members of the Eastern Suburbs Medical Association desire to inform you that, as they have not been consulted concerning the selection of candidates to represent suburban interests for the forthcoming election of councillors for the New South Wales Branch British Medical Association, in accordance with the practice of former years, they do not feel bound by the circular issued in the name of the three suburban associations."

N.S.W. Branch British Medical Association Resolution re Lodges.—It was resolved to adopt, with necessary local verbal amendments, as a By-Law, the resolution passed by the New South Wales Branch British Medical Association on Nov. 25th, 1898, and published in the *Australasian Medical Gazette* of Dec. 20th, 1898.

NEWCASTLE MEDICAL SOCIETY.

THE annual meeting of the Newcastle Medical Society was held at the Hospital on March 8th. Present: Dr. Beeston in the chair, Drs. Eames, Dunlop, Robt. Dick, Russell, Horsfall, Harris, Treloar, Harwood, Bean, Ayres, and Nickson (hon. sec.).

The SECRETARY read the annual report, in which he congratulated the society on the results of the past session; the meetings were well attended, and the members showed a lively interest in the work done.

The following papers were read:—

Dr. Beeston—Puerperal Eclampsia.
Dr. Beeston—Intussusception.
Dr. Robt. Dick—Anti Sera, with special reference to Diphtheria Anti-toxin.
Dr. Dick—Disinfection.
Dr. Horsfall—Quarantine and Smallpox.
Dr. Ludlow—Molluscum Contagiosum.
Dr. Nickson—Infantile Scoury.

The election of officers for the coming year resulted as follows:—President, Dr. Beeston; vice-president, Dr. Eames; hon. secretary, Dr. Nickson; hon. treasurer, Dr. Hester.

The president, Dr. Beeston, then read his annual address. (See page 144).

A vote of thanks to Dr. Beeston for the interest shown in the welfare of the society was carried by acclamation.

It was decided that the annual dinner should take place in April, and that the necessary arrangements should be left in the hands of the Hon. Secretary.

ROYAL SOCIETY OF TASMANIA.—MEDICAL SECTION.

THE annual meeting of the Medical Section was held on March 8th. Dr. Bright presided. The following members were unanimously elected as officers for the year 1899 and 1900:—Patron: Sir James Wilson Agnew, K.C.M.G.; President: Dr. R. S. Bright; Vice-Presidents: G. H. Butler, E. L. Crowther; Hon. Treasurer: A. H. Clarke; Hon. Sec.: Gregory Sprott; Committee Members: J. E. Wolfhagen, C. E. Barnard.

The Hon. Sec. gave a brief résumé of the work done during the past year, and pointed out, though a large number of books of reference had been added to the library, in addition to the journals and periodicals taken, there was still a substantial credit balance in the hands of the Treasurer.

After considerable amount of business matters had been dealt with, the meeting adjourned till the 5th April.

THE SYDNEY AND SUBURBAN PROVIDENT MEDICAL ASSOCIATION.

THE quarterly meeting (January-March) of the Sydney and Suburban Provident Medical Association was held at 121 Bathurst-street, on Tuesday, 11th April. Present:—Drs. W. A. West, W. F. Litchfield, E. H. Binney, R. Hodgson, A. A. O'Hara, Walter Spencer, A. E. Mills, F. J. T. Sawkins, A. E. Perkins, J. Parker, G. D. Menzies, McD. Gill, J. Adam Dick, Ralph Worrall, G. H. Abbott, C. U. Carruthers, H. Walton Smith.

In the temporary absence of Dr. Worrall, Dr. West was voted to the chair.

The Hon. Secretary (Dr. A. A. O'HARA) read the minutes of the last quarterly meeting, which were adopted.

The Chairman (Dr. WEST) stated that the dividend for the quarter was at the same rate as that of the previous quarter, viz., sixteen shillings per annum. He strongly impressed upon the active staff the importance of sending the admission forms of new members as soon as signed, to the office, in order that the names might be entered on the doctor's and chemist's lists, the books being made up only from these forms. He further testified to the value of the work of the hon. secretary, and to that of the hon. treasurer.

The hon. treasurer, Dr. Binney, made his statement as to the financial position of the association.

EXTRACTS FROM FOREIGN MEDICAL LITERATURE.

BY WALTER SPENCER, M.D., ENMORE, N.S.W.

IN *Archives Cliniques de Bordeaux*, October, 1898, Dr. Raulin contributes the result of long and careful study of *infantile dyspepsia*. He quotes previous authorities, and cites numerous test cases of his own in support of conclusions which correspond with those of Lesage. (1.) "That in the stomach of a breast-fed infant, the gastric chlorides combined with the elements of the milk exceed the total amount of acid present, leaving a portion of the contents alkaline or neutral, no free H.Cl. being given off." (2.) "That in one fed on artificial food, digestion is somewhat perverted, with special irritation due to the combined milk and chlorides being less than the total acidity, the difference being liberated as H.Cl., or as acids of fermentation."

The secretory aptitude of the nursing's stomach is but feeble, actual digestion only beginning at end of one hour. In Rachitis it is more feeble still, and the hydrochloric compounds are qualitatively altered to neutral or ammoniacal, which leads up to auto-intoxication and cellular inanition; the stomach becoming a laboratory of organic ferments whose acids, chiefly lactic, act by disorganising the osseous tissue and absorbing phosphates.

Les Nouveaux Remèdes, Paris, No. 1, 1889, notices the superiority of *Tannoform* (product of the condensation of Gallic Acid in Formaldehyd) in Ointment (10 per cent. to 33 per cent.) for external use in Eczema, Impetigo, Balanitis, Soft Chancre, Blenorrhagia, Herpes, Hæmorrhoids, Obstinate Tibial Ulcers, Rhagades, Ulcers of toe breast and genitals, even in cases where Iodoform, Dermatol and Euphraphin had failed. Suppurating wounds and ulcers which had resisted the action of Hg. Cls., of Zinc, of Sulphoidol, of Protargol and of Argentamin, were also benefited by it. It forms a crust and leaves no trace of irritation. It is said, when powdered on, to be the best remedy known for hyperidrosis of hands, feet, etc. It will also relieve cold feet during repose, without entirely suppressing natural perspiration, when used in ointment with strength of 33 per cent.

No. 3 of the same Journal describes the use of the new local anæsthetic *Ethyl Chloride cum Eucain* (the latter in 2 per cent. to 4 per cent. proportion) for operations on mucous membrane, chiefly of the mouth and teeth. The combination acts more rapidly and powerfully than Ethyl Chloride alone, and is dispensed in similar tubes. It is recommended for use in opening abscesses and removing cysts.

Salophen is said to act as well on muscular and articular Rheumatism, as the acid and salts of Salicin, without giving rise to tinnitus, vertigo, or nausea. *Annales de la Société Belge de Chirurgie*, January 15, 1899, Dr. Lavisé relates a case of Ureterorraphy. The patient had epithelioma of the uterus; she agreed to submit to hysterectomy. This was effected through the abdomen. A duct was found at the base of the right lateral ligament lying against the uterus, which was believed to be a vein symmetrical with one which had been found on the other side. It was severed and proved to be the ureter. Extirpation of the uterus was completed, and a catheter introduced into both segments of the ureter which was then reunited by five silk sutures. Unfortunately urine was seen to dribble out of the ureter just above the junction. The stitches were cut, a portion of the ureteral canal resected and resutured. By means of forceps passed up through the urethra, the vesical extremity of the catheter was then sought for, but could not be found. After dilata-

tion of the urethra, a digital examination discovered that the catheter had not entered the bladder. Being unwilling to meddle again with the ureter, the Doctor incised the anterior vesical wall, found that the end of the catheter could only be disengaged from a valvular mucous fold by an incision of the ureteral meatus, made the incision and released it. This wound having been stitched and the catheter drawn into the urethral canal, the bladder was closed with a double row of sutures, not including the mucous membrane. The upper end of a drain tube furnished with iodoform gauze was placed below the ureter, and the drain brought into the vagina. Above the drain the pelvic peritoneum was then sutured. The prevesical cavity was tamponned with iodoform gauze. The abdominal wall was sutured on separate planes. The operation lasted three hours. It was on October 21. The patient was discharged cured on November 19; micturition regular, urine normal.

LETTER TO THE EDITOR.

MEDICAL DEFENCE UNION WANTED IN QUEENSLAND.

(To the Editor of the *Australasian Medical Gazette*.)

DEAR SIR,—Would you kindly, through your columns, draw attention to the absence and want of, in Queensland, a Medical Defence Union, such as does good work in the Southern colonies. At the present time "*Nemo me impune lacessit*" is a dead letter in our profession. In these days of Unions, Friendly Societies, &c., all protecting the interests of patients, it becomes necessary for medical men to establish some safeguard, some barrier of defence, and this barrier will, I grieve to say, sometimes be found necessary as a protection against the kindly feelings of some brother medico, who, by your downfall, becomes possessed, temporarily at least, of "*spolia optima*" in the shape of practice. Quite recently an astute Hibernian related to me the case of a friend of his who had his elbow fractured (no comment necessary), and how a medical man who subsequently saw the arm offered to come down from the North and testify in a court of law, to malpraxis—this, too, unsolicited. I construe it because I know the narrator to be a member of a Hibernian Club. It certainly must make a man commencing his professional career reflect and wonder at the condition of affairs prevalent, when he finds that the members of his profession are invariably, by the public, relied on to traduce and undersell one another, and that if popular favour is held out any result may be attained. Surely it is time that we copied a leaf from the code book of our legal brethren. They have almost uninterruptedly presented a solid front to the public aggression. No clubs are on their list involving the supplying of legal advice at 15s. per annum, with all extras thrown in; there is no competition daily for favour from even the lowest orders; at the end of a year their figures do not show club visits averaging 6d. each; nor is there any legal institute providing free law for all, irrespective of income, to which institute the public are urged to go as an advertisement for those members attending it. I fear much that the proverbial charity of doctors has made a lash for their own scourging, if one man will not work for nothing (where the case does not warrant it) another will. I hope, Sir, some able and influential members of our profession in Queensland will try and induce some unity as regards a Defence Union, for I believe it would be very largely supported on all sides, and would help us to meet the public when assailed.

I am, Sir, yours, &c.,

QUEENSLAND.

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All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

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THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
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ADELAIDE, S.A.; AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH APRIL, 1899.

EDITORIALS.

THE MEDICAL SCHOOL, UNIVERSITY OF SYDNEY.

WITHOUT the slightest doubt, the Medical School of the University of Sydney has made great strides since its inception. Much credit is due to the Senate of the University for their careful planning of the necessary curriculum which inaugurated this most useful movement. Too much cannot be said of that master mind, the result of whose thoughtful planning, in-

cessant application, and indomitable perseverance in good work, culminated in the erection of that noble building, the Prince Alfred Hospital. Probably the time will come when a public memorial may be erected, to hand down to future generations the effigy of the possessor of that other indomitable spirit, whose boldness of project, tenacity of purpose, and great grasp of detail, is responsible for the rearing in our midst of that gigantic monument—the Medical School of the University of Sydney, at a cost to the country of something like eighty thousand pounds.

The statistics of the Medical School of the University of Sydney form a very interesting study.

According to the "Calendar of the University of Sydney for the year 1898," there were already on the roll thirty-three Doctors of Medicine, of which seventeen took their degrees "*ad eundem gradum*:" that is, they possessed the degree of M.D. from a University recognised by the Senate of the Sydney University, and by paying certain fees were admitted as members. Sixteen were Bachelors of Medicine of the Sydney University, and, having complied with the requisite formalities, were promoted to the degree of Doctor of Medicine.

Of the one hundred and twenty-one graduates as Bachelor of Medicine, seven outsiders took the degree "*ad eundem gradum*," and one hundred and fourteen have been turned out of the University of Sydney as a "Home-made Production." "All my work," the University might boast—like the doll maker in "*La Poupée*."

In addition to this, we have an embryonic element to consider:—

According to the report of the Senate of the University of Sydney to the Legislative Assembly of New South Wales, we find the following regarding the

FACULTY OF MEDICINE.

	Candidates.	Passed.
First-year examination	25	19
Second-year examination	38	25
Third-year examination	23	16
Fourth-year examination	29	21
Fifth-year examination	23	22
	138	103

showing that in all stages the aspiring medicos of the School of Medicine of Australia—or that part of Australasia where the enigmatic Federal Capital at some future age may exist—amounts to one hundred and thirty-eight, of whom one hundred and three have managed to pass the rubicon in various stages. This, however, does not give the exact number of rudimentary healers of the sick and

curers of the maimed, as we find in a detailed account of the attendances at lectures that at the present time the number of students attending the Faculty of Medicine amounts to one hundred and fifty-four. Assuming that one-fourth of these may fail in their examinations, there is a possibility within the next few years of there being added to our local medical acquisitions about 116 new graduates in medicine and surgery, and thus find the following additions to our Home production of practitioners in Medicine and Surgery.

Doctors in Medicine	16
Bachelors of Medicine	114
Probable product in five years	116

246

That is to say, that from the inception of the Medical School of Sydney to about five years hence, we shall have, without counting new arrivals from European and American Universities, about 246 Medical graduates of the Sydney University launched into the maelstrom of that struggle for existence, which may possibly exemplify some interesting features regarding the problem of the survival of the fittest. Already New South Wales is over-proportioned in the ratio between Medical practitioners and the population of the colony. To Sydney graduates in medicine and surgery is accorded the prior claim to the positions of resident medical officers in the leading Metropolitan hospitals, to the detriment of other and possibly more experienced and deserving candidates; in fact, this raw material is deputed to gain experience upon the Sydney maimed and poor. Much tension is produced in Medical circles attached to country hospitals by a claim asserted for similar concessions throughout the colony. Those who originated and fostered the Medical School of Sydney little knew the Frankenstein that they were constructing for the disaster of already existing interests in the Medical profession in contributing towards the creation of a soulless fabric calculated to destroy the Medical practitioners of New South Wales.

We cannot speak too strongly upon the failure of the professors and lecturers of the Sydney University in contributing to the annals of Medical Science. We ask after these fifteen or twenty years of so-called scientific pursuits in Physiology, Pathology, Anatomy, Medicine, and Surgery, what useful contributions have been made by the Professional Staff of the University towards the advancement of Medical Science? What have we to show for this eighty thousand pounds spent on the Medical School, and the enormous annual expenditure

in supplying scientific appliances and payment of professors and teachers?

The answer is: Nothing whatever—but the over-crowding of the Medical profession and the impoverishment of the majority of efficient and hard-working Medical practitioners.

We submit these observations to the attention of the members of the Legislature who annually vote the sinews of war to our Educational bodies—and we hope to speak more emphatically at a future date, when the Estimates for the ensuing year shall be about to be considered.

ARE COLONIAL PUBLIC HOSPITALS CHARITABLE INSTITUTIONS?

In an editorial in our issue of February last (see p. 79), we put a pertinent question—"Are Colonial Public Hospitals Charitable Institutions?" And we pointed out how hospitals, to the funds of which the State contributed, became the powerful opponents in medical and surgical practice of the medical profession. We submitted that patients were admitted to the paying wards of hospitals who had no right to enter such institutions, as they were well able to pay for medical attendance and nursing. We maintained that those hospitals which do not take reasonable precautions against supplying medical and surgical assistance and indoor relief to impostors and to unsuitable subjects were fraudulently misappropriating the funds furnished to them by a charitable public and subsidised by a confiding Government. Some light is thrown upon this question by the report of the Secretary to the Walgett Hospital Committee (see page 171) in reply to letters of inquiry addressed to fifty-three kindred institutions, to which forty-three replies were received. It appears that thirty hospitals indulged in the privileges of having pay wards for the accommodation of private patients, while the remaining thirteen admitted that such wards were but a moderate success. So much for the abuse of public hospitals in this colony; and it will be a nice question of ethical morality regarding the committees of these hospitals, to inquire if they put down the fees received from these patients as voluntary contributions and claim from the Government the usual pound for pound subsidy. Comment is needless respecting the wealthy Brewarrina patient who occupied a ward in the hospital of that district for three months, notwithstanding the fact that he was well able to pay for medical attendance and nursing at

his own home or elsewhere, will show that this abuse of hospitals is rousing the lay press of Western Australia.

UNATTACHED MEMBERS OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS of the Australasian Branches of the British Medical Association will be pleased to know that the Home Council has passed a rule to the effect that no medical practitioner in the Colonies or India shall be elected as an unattached member of the Association without the general secretary communicating with the secretary of the Branch of the locality where the candidate resides. This provision has been asked for by the Victorian and South Australian and other Branches of the Association more than once. From our London correspondent's letter (this page) it will be seen that the proposer of the new provision was one of the colonial representatives upon the Council (Dr. P. Sydney Jones, of Sydney), thus showing the value of possessing representatives from the colonies upon the executive body of the Association. The usefulness of the new rule is, we think, apparent to the members of all Branches concerned.

THE WALGETT HOSPITAL.

At a Special Meeting convened for the purpose of considering the advisability of establishing a private ward at this Hospital, held on the 23rd of March, 1899, the following resolutions were passed:—

1. That a private ward be established at the Hospital, and that patients be charged £4 4s. per week, the charge to cover everything.
2. That no lying-in patient be admitted to the private ward.
3. That a patient be allowed to choose his doctor from the medical staff.
4. That when special nursing is required, the patient is to pay £2 2s. extra.

During the discussion which took place prior to the passing of these resolutions, the SECRETARY announced that he had written to fifty-three kindred institutions, soliciting information respecting the management and working of private wards. Replies had been received from forty-three, of which thirty had replied that private wards were connected with their institutions. The remaining thirteen stated that private wards were found to be only of moderate success. West Maitland and Berry reported that at their institutions they had resulted in a loss. On the other hand, towns like Coonabarabran, Warialda, Brewarrina, Moree and Narrabri had found that they were a great convenience, and, although they were but little used, it was admitted that they were a decided advantage.

One of the arguments used to advocate the establishment of a private paying ward was that at Brewarrina they had only accommodation for one private patient; that it had been occupied by a very wealthy patient

for the last three months, and he, as a rich man, could have afforded to pay for nursing and medical attendance at his own home. Yet he preferred to impose upon the public institution. This gentleman had had typhoid fever, and for upwards of three weeks his life was despaired of, but, thanks to the cheap accommodation and careful nursing, his valuable life was spared.

A POSSIBLE RECORD.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Two days ago I visited a young man who was suffering from measles at his parents' house in the bush.

When I was leaving the house the patient's father said, "It's over forty years since his mother and I were married. We have lived here ever since, and have reared ten children, and you're the first doctor who was ever near the place."

A. W. ELSEB.

Heathcote, Victoria, 6th April, 1899.

LONDON LETTER.

Obituary.—The Open-air Treatment of Pulmonary Phthisis.—Unattached Members of the British Medical Association.

RARELY has there been such a rapid succession of deaths of eminent scientific professors as has been recorded during the last few weeks. Professor Kant-hack, who has died at such an early age, has been a very busy worker, and had the peculiar faculty of inspiring in others a zeal for work and knowledge, and will be much missed, specially by the Cambridge medical students. Dr. G. Sims Woodhead, who has been appointed to succeed him in the Chair of Pathology at Cambridge, is well known to several Edinburgh graduates now in New South Wales. He received a warm welcome and congratulations on his appointment, when he appeared at the last meeting of the Pathological Society of London to open a discussion on pseudo-tuberculosis. Professor Rutherford was well known to several generations of Edinburgh students, and has long been a distinguished professor of physiology at the University there. Professor Coats, professor of pathology at Glasgow, was also well known to medical students and practitioners through his work on pathology. Several medical men will remember his being present at the conversazione at the University of Sydney, given by the Australian Association for the Advancement of Science, in January, 1898. Now we learn of the death of Sir John Struthers, who for many years was professor of anatomy at Aberdeen University, and recently vice-president of the Royal College of Surgeons of Edinburgh. He had reached the advanced age of 79 years, and still acted as examiner in anatomy at the College.

The open-air treatment of consumption still continues to occupy a prominent place, not only in medical but also in lay circles. In the report presented to the 30th annual meeting of the Ventnor Consumption Hospital, it is stated that 840 patients have been treated during the year, and 21 additional beds are to be opened by the erection of the eleventh block of buildings. As regards the open-air treatment, the Board states that this has been carried out for many years at this hospital on strictly scientific lines, and, with that object in view, each successive pavilion had been erected on an elevated but sheltered terrace facing due south, with an uninterrupted view of the sea.

As regards the general treatment of pulmonary phthisis, it is remarkable how rapidly and to what an extent cases improve, even in the London hospitals, without any special treatment, and this makes it extremely difficult to actually gauge the influence of any special line of treatment or drug in improving the condition of these patients. I was told recently of a case of phthisis which was admitted to a chest hospital in London, and the only drug given was thyroid extract. The patient gained a stone in weight in a month, and was markedly improved in every way. Had any special line of treatment been adopted, this case might have been advanced as a marvellous result!

At the quarterly meeting of the Council of the British Medical Association, held in January, on the motion of Dr. P. Sydney Jones, one of the representatives of the New South Wales Branch, it was resolved that in future "no medical practitioner in India or the Colonies be elected an unattached member of the British Medical Association until his or her name has been submitted to the Branch Secretary for report." It is satisfactory that what has for a long time been aimed at by the Australian branches has thus been secured. It is not probable, however, in the present state of affairs in Great Britain that any attempt to compel unattached members of the Association in the colonies to join the local branches, will be received with favor, since here the number of unattached members forms such a large proportion of the total membership.

Oral examinations are not generally the most pleasant experiences either for the examinees or examiners, though we generally think the examiners have the best of it. But an incident at a medical examination in Paris recently shows that the examiners may, perhaps, sometimes get the worst of it. A Polish lady medical student had selected as a subject for her thesis, the injurious effect of corset wearing on women. On being called before the examiners, she found herself face to face with three medical gentlemen, who maintained that the abuse and not the use of the corset was injurious. The lady, however, took a firm stand, and defended her thesis. In the end, so the story goes, the examiners were silenced, and mademoiselle was passed with honors.

NEW SOUTH WALES BOARD OF HEALTH.

ANNUAL REPORT, 1897.

THE report of the N.S.W. Board of Health for 1897, has been laid before Parliament. It gives a lengthy summary of the work of the Board. With reference to the notification of infectious diseases the report states that the Board had to decide which of the long list of communicable maladies met with in this country should be proclaimed to be infectious diseases within the meaning of the Act. It was thought best to begin with a short list, to which additions might subsequently be made, and diphtheria and membranous croup, typhoid or enteric fever, and scarlet fever were decided upon. In designing the machinery the objects kept in view were the following:—To record medically certified cases alone; to secure prompt notification to local authorities; to cause local authorities to record it, and then to promptly transmit the information to the central bureau; there to distribute all cases to the districts to which they rightly belonged; and once a fortnight to show on a diagrammatic map how many cases of each disease had occurred in each police district and in each municipal district within it, and the deaths which had been thus caused. Regarding the adulteration of food, it may be said that upon the whole the board has concluded that it is desirable and

necessary that provision should be made for the systematic inspection of the food supply by its own officers, and that there is no present prospect that any tangible benefit will result from this part of the Act under any other arrangement; but to do this it will be necessary to substantially increase the staff.

In relation to the Dairies Supervision Act, the report says that a good deal of complaint was made by dairymen during the year on two subjects—a requirement that the flooring of all cowsheds and bails should be constructed of impervious material as far as might be, and that no cesspit should be allowed to continue on dairy premises. As to "impervious" material, what is meant by the term is properly squared and bedded stone slabs, or hard bricks on edge set in cement or concrete, though hardwood planks, squared, securely fixed, and carefully caulked, are also allowed; in short, a material which is not freely absorbent on the one hand, and which, on the other, can be swilled down and kept clean with a minimum of trouble. There is no difference of opinion among dairy experts as to its necessity, nor as to its value as an aid to the production of a milk which will keep sweet long enough for the ordinary purposes of trade; and if there were any such difference, then there is no doubt that a knowledge of country and town dairies as they were ten years ago, and comparison with the present state of the improved majority, would adjust it. The requirement was not new, but during two or three years past the board has advised local authorities to act with a little more stringency than had been customary before—though, at the same time, to do so with discretion and without inflicting hardship in any case. As regards such advice, it has, of course, been faithfully carried out in all districts which are under police local authorities. Municipal authorities have not been as punctual, and probably a great part of the discontent expressed arose in a consequent feeling of inequality among neighbours who were divided from each other by the municipal boundary. The truth is that this requirement can be easily complied with—that is, without difficulty, or considerable expense, or even much labor, by all dairy farmers; and that it is in reality a matter of interest to the whole country in so far as the sale of dairy products is a factor in its prosperity. For instance, the slovenly milk producer is almost compelled to use preservatives in order to carry his milk even so short a distance as to the creamery, and so as to deliver it in a condition in which it will be received there. The clean dairyman is not under any such necessity. Now, the use of preservatives is bad in itself, but it is worse still in as far as it serves to cloak a fault which carries with it other and even more serious dangers than premature putrefaction of the milk.

During the year seven cases of illness were reported to the board under the Leprosy Act, 1890. It was found that three were cases of leprosy, while the remainder were of other kinds of disease. Of the three patients who were declared to be lepers two were admitted to the lazaret; one, who had recently arrived for medical treatment from Queensland, expressed his wish to return home, and was allowed to do so. All were whites—one of native, two of foreign birth. Regarding the Glebe Island Abattoir the report points out that the abattoir is fundamentally wrong in construction, and never could be converted either into a suitable building, or even into a building as suitable to its purposes as are many of the meatworks scattered over the country, except by a process of demolition and re-erection. In the natural course of deterioration it cannot much longer be utilised without reconstruction;

but, in the opinion of the board, it should be rebuilt en quite another site. It is also desirable that this business, which, as a business, is an unusual matter to be placed for management under the central health authority of the country, should be transferred as soon as possible to municipal control.

PUBLIC HEALTH.

THE first annual report of the N.S.W. Board of Health is to hand, and has been forwarded by the President of the Board (Dr. J. Ashburton Thompson) to the Premier and Colonial Treasurer, and has been laid before Parliament. The report, which deals with the year 1897, is a concise document, and summarises in a satisfactory manner the important and varied work of the Board.

In view of the importance of the cattle tick fever to N.S.W., the Department of Public Health has published the results of a series of investigations carried out by its officers. The document is entitled: "Report on Protective Inoculation against Tick Fever: An Account of an Experimental Inquiry into its effect on Cattle, and on Meat and Milk; together with some Notes on Protective Measures other than Inoculation by Frank Tidswell, M.B., Ch.M., D.P.H., Principal Assistant Medical Officer of the Government." Along with this report there is a short account "On the initiation of protective inoculation against tick fever in the North Coast districts of N.S.W.," by Jas. Douglas Stewart, M.R.C.V.S., Veterinary Surgeon to the Stock Branch.

The report on leprosy in N.S.W. for the year 1897 has also been published. It is brief and to the point, and has been prepared with the usual care bestowed upon this disease by the Health Department. There are three appendices which contain valuable information upon all the cases that have been under official supervision since the establishment of the Lazaret in 1883.

The Health Officer of Hobart (Dr. G. Sprott) reports that during the month of February there were 37 deaths registered in the registration district of Hobart, but three of these were of persons not usually resident in the district. There were 23 deaths—Males, 14; females, 9—in the city, giving a death-rate equal to 9.12 per 1,000 per annum. The principal causes of death were:—Phthisis, 2; cancer, 1; hydatids, 1; pneumonia, 1; enteritis, 4; diseases of liver, 1; atrophy, 4; and the remainder were of a general nature. Of the deaths, 12 were of persons under 1 year of age, 2 between 1 and 5 years, 8 between 5 and 65 years, and 1 over 65 years of age.

Scarlet Fever is prevalent in Hobart, and considerable dissatisfaction is expressed at the inactivity of the Government in not providing an Isolation Hospital. The Central Board of Health have had the matter under their consideration for some time, but nothing practical has been attempted.

The Metropolitan Drainage Board of Hobart has received reports on the sufficiency of the water supply of Hobart for the contemplated sewerage scheme from Mr. Napier Bell and Mr. St. John David, engineer of Launceston. Both of these gentlemen consider the water supply ample for the purposes of drainage and the Board has now decided to take a vote of the people and if the majority are in favour of borrowing the requisite amount of money, the work will be started immediately.

VITAL STATISTICS.

SYDNEY.—There were 932 births and 415 deaths registered in Sydney during February. The principal causes of death were:—Measles, 8; typhoid fever, 12; meningitis 10; enteritis, 37; pneumonia, 12; cancer, 35; phthisis, 37; whooping cough, 30. There were 5 suicides.

MELBOURNE.—The chief causes of death in greater Melbourne during February were as follows:—Diphtheria, 4; cancer, 32; phthisis, 51; whooping cough, 21; bronchitis, 9; typhoid fever, 25; pneumonia, 27. There were 606 deaths registered during the month, and 922 births.

ADELAIDE.—There were 100 births and 85 deaths in Adelaide during January. The principal causes of death were:—Measles, 1; whooping cough, 3; cancer, 7; phthisis, 6; old age, 9; pneumonia, 4; enteric fever, 6; enteritis, 1.

TASMANIA.—The Government Statistician's report on vital statistics of the colony shows that during the month of February 81 births were registered in Hobart and Launceston. This is a decrease of 31.4 as compared with the average of the births registered in January during the last five-yearly period. To every 1,000 of the population of the two districts the proportions of births registered were as follow:—For Hobart, 1.28; for Launceston, 1.12; all, 1.22. Deaths.—The deaths registered in January in Hobart and Launceston numbered 57. The total number of deaths registered in the two districts during February, 1899, shows a decrease of 25.4 as compared with the average number of deaths registered in January during the last five-yearly period. To every 1,000 of the population of the respective divisions the proportions of deaths registered were as follow:—Hobart, .91; Launceston, 1.05; all, .97. The deaths under 5 years of age numbered 29, or 45.81 per cent., of which 22 were under 1 year of age.

BRISBANE.—During January there were 145 births and 109 deaths. The chief causes of death were:—Measles, 2; scarlatina, 8; typhoid, 5; dengue, 1; pertussis, 1; diphtheria, 8; tubercular diseases, 29; cancer, 7; enteritis, 11; pneumonia, 7.

NEW ZEALAND.—During January, 1899, the number of births and deaths respectively were in Auckland, 118, 55; Wellington, 89, 38; Christchurch, 69, 57; Dunedin, 92, 52. Total births, 368; total deaths, 202. In the four cities there were deaths from measles, 8; cancer, 18; phthisis, 22; diarrhoea, 20; old age, 5; pneumonia, 4.

HOSPITAL INTELLIGENCE.

BRISBANE HOSPITAL.

THE fiftieth Annual Report of the Brisbane Hospital (1898) has been received. It is the Jubilee Report of this excellent institution, and contains much interesting and valuable information relating to the early history and steady expansion of the hospital. During 1898, the total number of cases under treatment was 4,110, or 752 more than 1897. This increase is chiefly due to epidemic disease. The average cost per bed for the year was £56 7s. 6½d. There were 147 cases of typhoid; 109 of febricula; 120 of tuberculosis; 59 of pneumonia; 569 of scarlet fever, with 41 deaths; 181 of measles, with 7 deaths; 26 of German measles; 154 of dengue fever, with 4 deaths; 23 cases of

diphtheria, with 9 deaths. The receipts amounted to £15,656, the expenditure to £15,526. All concerned are to be congratulated upon this Jubilee report.

HOSPITAL ECONOMICS.

The Kalgoorlie Miner (W.A.) for March 21st, 22nd, 23rd, contains lengthy articles upon "A Study" of the above subject. The writer shows an acquaintance with the hospitals of the Southern and Eastern colonies, as well as with those of Western Australia. The abuses attached to these institutions are great throughout Australia, and in the case of Western Australia, in some localities at least, it would appear they are notorious.

LITERARY NOTES.

What our Patients Hear.—The following lines were written by a patient who last year consulted a metropolitan medical man. Their accuracy can be attested. *Palmar ferat qui meruit.* There are evidently some objections against telephones!

TELEPHONE.

Poor Doctor Gunn, he
Went to the study
To answer the telephone.
When he got there
He sat down in a chair,
And spake—
in an undertone.

"Hullo! who is there?
What's that? Can't hear—
Oh, *dash* the telephone!"
And then, his voice raised,
He sprang up amazed
And swore—
not in undertone.

And yet once again
He tried, but in vain;
And rattled the telephone.
At last he rang off,
Gave a violent cough—
Then said "D—n!"—
in an undertone.

A.D.M.

DOCTOR.

BY A DYSPEPTIC G. P.

(With apologies to R. K.)

I entered the profession, like other men, to live;
I've found how very few and rare the prizes it can give.
I've striven long from ill and death my fellow men to guard,
And many kicks and ha'pence scant received as my reward.

For it's Doctor this, and Doctor that, and "Doctor's gross mistakes,"
But it's "Run and fetch the doctor," when the little finger aches—
When your little finger aches, my friends, your little finger aches;
Oh, it's "Run and fetch the doctor" when your little finger aches.

We bolt our meals, we scamp our sleep, we little know of rest;
Through four and twenty hours we wait the club-patient's behest.

You ring us up at midnight, you rush us all the day,
You wear our souls and bodies out, and then refuse to pay.

For its Doctor this, and Doctor that, and "What a monstrous bill!"

But it's "Doctor, won't you save her?" when the only child is ill—

When your only child is ill, my friends, your only child is ill;

Oh, it's "Save her, never mind the cost!" when the only child is ill.

We face the plague and pestilence, greet danger with a laugh;

We win our V.C.'s, day by day, and get repaid in chaff.
The very depths of human life, the foul and mean we scan;

But bitterness of all we find the ingratitude of man.

Oh, it's Doctor this, and Doctor that, and "laxy careless brute;"

But it's "Noblest of professions" when the pains begin to shoot—

When your pains begin to shoot, my friends, your pains begin to shoot;

It's "Noblest of professions" when your pains begin to shoot.

You spend your time in idle talk, and pass the careless lie—

How that d—d doctor messed your case, and made you nearly die.

And everywhere you seek to do him all the harm you can,

And, vile traducer though you be, pose as an honest man.

For its Doctor this, and Doctor that, it's charlatan and quack;

But it's "Skilfullest physician" when you're laid upon your back—

When you're laid upon your back, my friends, you're laid upon your back;

Oh, it's "Skilfullest physician" when you're laid upon your back.

The papers rave about our mission, which they call divine,

Or deprecate our selfishness because we dare combine.
The manna drops from heaven, they think, to feed us and our wives;

Our business not to save our own, but only other lives.

For it's "Sawbones this," and "Butcher that," and any other taunt;

But in the Valley of the Shadow it's the doctor that you want—

It's the doctor that you want, my friends, it's the doctor that you want;

In the Valley of the Shadow it's the doctor that you want.

MEDICAL NOTES.

Friendly Societies.—Dr. N. P. Elliott has been elected Medical Officer to the United Friendly Societies of Toowoomba, Q.

Presentation to a Medical Man.—Dr. P. E. Corlis, late of Ballina, has been entertained at a *Conversazione*, and presented with two addresses, by the citizens of Ballina, N.S.W., prior to his departure for Canada.

MILITARY INTELLIGENCE.

NEW SOUTH WALES.—His Excellency the Lieutenant-Governor, with the advice of the Executive Council, has been pleased to approve of the following appointments:—*New South Wales Army Medical Corps (Volunteer Establishment)*—John Kerr, gentleman, M.B., Ch.M. Glasg., to be Lieutenant; Michael O'Gorman Hughes, gentleman, B.A., B.Sc., M.B., Univ. Syd., to be Lieutenant.

Major Robert Vandeleur Kelly, *New South Wales Army Medical Corps*, has been promoted to the rank of Brevet Lieutenant-Colonel, in consideration of his long and meritorious services.

NEW ZEALAND—His Excellency the Governor has been pleased to approve of the following appointment:—*Ellersmere Mounted Rifle Volunteers*—Thomas John Withers, M.D., Ch.M., B.U. Irel., to be Surgeon-Captain.

OBITUARY.

HUGH TILSLEY MASSEY, L.R.C.P. Edin., 1881, L.R.C.S. Edin., 1881, formerly of Selsdon, Walmer, Kent, England, and recently travelling as a Medical Referee for the Australian Mutual Provident Society, in N.S.W., died suddenly early on March 12th, 1899, at Wee Wee, N.S.W. The deceased had been in the colony for two years, and was a brother of Dr. H. M. Massey, of Hillgrove, N.S.W.

WILLIAM MCCREA, M.B.C.S. Eng., 1833, L.S.A. Lond., 1834, M.B. Lond., 1848, M.B. Melb., 1868 (a.e.g.), died at Melbourne, in February, 1899. Dr. McCrea had retired from the practice of his profession. He was a colonist of thirty-seven years. His name was the first on the Medical Register of Victoria. During his career he held many responsible positions. He was formerly Chief Medical Officer for Victoria.

SIR JOHN STRUTHERS died in Edinburgh on 24th February. He was born in 1823, near Dunfermline, Scotland. In 1845 he obtained his M.D. and F.R.C.S. degrees. After some years of teaching, he was in 1863 appointed to the Chair of Anatomy in Aberdeen University. Through Dr. Struthers' persistent advocacy, that school built new dissecting rooms, a new lecture theatre, and a new museum. Attached to the dissecting room was a microscope-room—which in those days was regarded as a highly-progressive movement. The history of this medical school shows that while in 1861-62 the total students of medicine numbered only 160; in 1889-90, the last year in which he taught there, they numbered 433. Sir John Struthers' lectures were objective and demonstrative, his method being to present before his hearers striking object lessons, and thus impress upon their minds the facts brought before them. As a member of the Aberdeen Royal Infirmary Board, Professor Struthers urged, and ultimately obtained extensions to the Hospital. Subsequently he became a member of the Edinburgh Infirmary Board. On the Leith Board he promoted the exclusion of infectious cases, and thus relieved the Hospital of increased amount of general medicine and surgery work, removing the burden to the proper shoulders, those of the local authority. Later, he became President of the Royal College of Surgeons of Edinburgh, and in 1898 the Queen conferred on him a Knighthood. The Glasgow University honoured him with the LL.D.

degree previous to this. Present at the Lister reception in June last, Sir John Struthers was obviously in ill-health. He went a voyage to Norway, and afterwards retired to live in the country, but without avail, and at length he had to take to his bed through weakness, and the end came in February. Sir John Struthers was a masterful personality, and his devotion to work pervaded not only himself, but was communicated to those whose instruction he undertook. The fruits of such efforts are apparent in many prominent medical men of the present generation.

MEDICO-PARLIAMENTARY.

PROPOSED INDECENT PUBLICATIONS BILL (N.S.W.)

Further need for an efficient statute similar to that introduced to parliament by Dr. James Graham, M.L.A. in 1898, and not carried, dealing with indecent publications of all kinds in New South Wales is shown by the following (*Sydney Daily Telegraph*):—During an address upon the "Christian Government of the Mind," the speaker referred to the evil of reading impure literature, and to the prevalence of objectionable advertisements in many of the papers. The bold way in which certain literature was exhibited for sale in the windows of a few of the small shops in Sydney was remarkable. It was strange that the public should tolerate such a condition of things. A Sydney doctor, in giving evidence in a court case during the past week, had said that the advertisements referred to were a "disgrace to the country." In New Zealand, the law would not permit of nasty literature being sold, and it even went as far as to prohibit the selling of papers in which these advertisements appeared. Within the last few weeks a Dunedin bookseller had been fined for selling certain Australian papers which happened to contain such advertisements. It was a most noteworthy thing that the law in question was not passed at the instance of the clergymen of the colony, but at the instigation of the New Zealand Medical Council. The leader of the movement in that council was Dr. King, the head of one of the largest lunatic asylums in the colony. That was a very suggestive fact. If, then, harm was done by young people reading such literature, and by coming into contact with the people who advertised, how great must be the harm done in Australia, and particularly in Sydney, for quacks here were almost as thick as flies, and books and advertisements on indelicate subjects were very much in evidence.

MEDICO-LEGAL.

MEDICAL MAGISTRATES:—Dr. William Henry Lang has been appointed Deputy Licensing Magistrate of the Licensing Court for the Licensing District of Corowa, N.S.W., during the absence of the Police Magistrate. Dr. Leonard Robinson of Gladstone, Q., has been appointed a Justice of the Peace for Queensland. Dr. George Walker Watt has been appointed Member of the Licensing Court for the Licensing District of Narrandera, N.S.W.

SELLING DRUGS WITHOUT LICENSE (Tas.).—J. Liadeen was charged at the Hobart Police Court on March 30th with vending medicine without having a certificate from the Court of Medical Examiners. The defendant, who styles himself an oculist and pile specialist, is a Hindoo, pleaded guilty, and the magistrates fined him £10 and costs or three months in prison. A further charge of practising as a surgeon was withdrawn. The fine was paid.

CHANGE OF ADDRESS, ETC.

ALLAN, Dr. GEORGE, recently of the Royal Navy, has commenced practice in Smith-street, Summer Hill, near Sydney.

BOURKE, Dr. J. J. F., a recent arrival, has settled at Charters Towers, Q.

CORLIS, Dr. P. E., of Ballina, N.S.W., has left the district *en route* to Canada. His brother, Dr. Charles Corlis, has taken his practice.

CURELL, Dr. H., has commenced practice at Kyabram, Vic.

FINEMORE, Dr. L., has removed to Eidavold, Q.

FOX, Dr. R. A., late of Auckland Hospital, has gone to Gladesville Hospital, N.S.W.

GRAHAM, Dr. C. H., has commenced practice at Tungamah, Vic.

LATOUR, Dr. H. A. DE, has removed from Oamaru to Dunedin, N.Z.

MARCO, Dr. E. DE, has commenced practice at Coolah, N.S.W.

MARKS, Dr. H. W. J., has commenced practice at Woolahra; also at 199 Macquarie Street, Sydney.

PAYNE, Dr. J. W., has removed from Latrobe to West Devonport, Tas.

ROTH, Dr. REUTER E., has removed from Collegestreet to 65 Darlinghurst-road, Sydney.

THOMSON, Dr. J. E., has settled at Warrnambool, Vic.

TURKINGTON, Dr. H., has succeeded to the practice of Dr. J. McMaster, at Merriwa, N.S.W.

YOUNG, Dr. H. O. TAYLOR, formerly of Grafton, has commenced practice at 209 Macquarie-street, Sydney.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced:

CORLIS, Dr. Charles, to be Medical Officer of the Hospital at Ballina N.S.W., *vice* Dr. P. E. Corlis, resigned.

FOX, R. A., M.B. Edin., to be Resident Medical Officer at the Hospital for Insane, Gladesville, N.S.W.

Finemore, J. H., L.R.C.P. Edin., to be Medical Officer at Eidavold, Q.

Hawthorne, E. S., L.R.C.S. Irel., &c., to be Medical Officer at Georgetown, Q.

Higginson, R. W., M.B., &c., to be Officer of Health for Belfast Shire, Vic., *vice* Dr. W. H. Shirreff, resigned.

Lindsay, H. S., L.R.C.P. Lond., &c., to be Acting Medical Officer at Longreach, Q.

Manning, F. Norton, M.D., &c., to be a Member of the Board of Health of N.S.W.

Mountaine, John, L.S.A. Lond., &c., to be a Public Vaccinator for the District of Maungaturoto, N.Z.

Plummer, Dr. (Miss) V. M., to be Resident Medical Officer of the Infirmary Department of the Women's Hospital, Melbourne.

Rennie, Dr. George H. (late of Sydney), to be Pathologist to the City of London Hospital for Diseases of the Chest, Victoria Park, London.

South, H., M.B., &c., to be Acting Public Vaccinator and Certifying Medical Practitioner for the Factories and Shops' Act, Metropolitan District, Melbourne, *vice* Dr. Wm. Dalsh, absent on leave.

Springthorpe, J. W., M.D. Melb., &c., to be a Member of the Dental Board of Victoria.

Violetta, W. B., M.B. Glasg., &c., to be Medical Superintendent of the N.S.W. Government Hospital, Little Bay, near Sydney.

Williams, J. W., M.B. Edin., &c., to be Health Officer and a Public Vaccinator for the Port and District of Gisborne, N.Z.

MEDICAL RESIGNATIONS.

The following Medical Resignations are announced:

CORLIS, Dr. P. E., as Medical Officer of the Hospital, Ballina, N.S.W.

Shirreff, Dr. W. H., as Officer of Health for Belfast Shire, Vic.

MEDICAL VACANCY

(See p. 143).

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Brade, Gerald Francis, M.B. Univ. Sydney, 1899.

Shorter, Herbert Leopold Ashton, M.B. Univ. Sydney, 1899.

Willis, Charles Savill, M.B. Univ. Sydney, 1899.

Butler, Frederick Stanley, M.B. Univ. Melb. 1898.

Stewart, Percy Bloomfield, M.B. Univ. Melb. 1898.

Belh, Ranieri, M.D. et Ch. D. Univ. Siena, Italy, 1893; State exam., certiff. Florence, 1898.

Baptista, Hans, M.D. Keokuk Med. Coll. Iowa, U.S.A., 1898.

For Additional Registration.

Young, Hugh Corbett Taylor, M.D. Univ. Glasg., 1897.

Hart, John Wesley, M.D., Univ. Edin., 1898.

Millard, Reginald Jeffery, M. Ch. Univ. Syd., 1891; D.P.H. Camb., 1897.

Marks, Herbert William James, M.R.C.S. Eng., 1896; L.R.C.P. Lond., 1896.

VICTORIA.

Currell, Hugh, M.B. et Ch. B. R. Univ. Irel., 1897.

Gamble, Morris Frederick Horsley, L.R.C.P. et R.C.S. Edin. et L.F.P.S. Glasg., 1896.

Thomson, John Erskine, M.B. et Ch. M. Edin., 1890.

Graham, Charles Hunter, L.R.C.P. Lond., 1893; F.R.C.S. Edin., 1897; D.P.H. Camb., 1897.

Clarke, Percy Gowan, L.R.C.P. et R.C.S. Edin. et L.F.P.S. Glasg., 1896.

Additional Qualification.

Hearne, William Weston, Ch. B. Melb., 1897.

Name of deceased practitioner erased from the Register.

McCrea, William, M.B.

QUEENSLAND.

Bourke, James Joseph Fitzgerald, Lic. Lic. Midwif. 1897, B. Coll.

Phya Irel.; Lic., Lic. Midwif. 1897, B. Coll. Surg. Irel.

Hollinshead, William Herbert Joseph, M.B., Mast. Surg., Univ. Edin., 1896.

SOUTH AUSTRALIA.

Fooks, Edward Verdon Russell, L.R.C.P. Lond., 1894; M.R.C.S. Eng., 1894.

BIRTH AND DEATHS.

BIRTH.

HINDER.—On the 17th March, at Summerlee, Ashfield, N.S.W., the wife of H. Critchley Hinder, M.B., of a daughter.

DEATHS.

MASSEY.—On the 13th March, 1899, suddenly, at Wee Wee, N.S.W..

Dr. Hugh Tilley Massey, brother of Dr. H. M. Massey, of Hillgrove, N.S.W.

MOORE.—During February, 1899, at Melbourne, Dr. William McCrea, formerly Chief Medical Officer for Victoria.

"TABLOID" BISMUTH AND DOVER POWDER.—

We have received from Messrs. Burroughs, Wellcome and Co., a specimen of "Tabloid" Bismuth and Dover Powder.

This preparation is made in accordance with the following formula.—Bismuth Subnitrate, grs. 24,

Dover Powder, 24. This combination of Bismuth with

Ipecacuanha and Opium has been found to give relief

in acid dyspepsia and in irritable conditions of the

stomach. In diarrhoea and dyspepsia good results are

often obtained by the administration of frequent small

doses of these combined drugs. We have much

pleasure and confidence in directing the attention of

our readers to this preparation.

The Editor invites members of the Profession to forward to him terse notices of Medical Resignations, Vacancies and Appointments, Removals and other items of professional interest.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

TWO CASES OF SYRINGOMYELIA (WITH EXHIBIT).

BY G. L. O'NEILL, AND SINCLAIR GILLIES,
M.B. EDIN., HON. M.A., N.Z., M.D.
PHYSICIAN TO ST. LOND., HON. ASSIST-
VINCENT'S HOSPI- ANT-PHYSICIAN TO
TAL, SYDNEY. PRINCE ALFRED
HOSPITAL, SYDNEY.

A CASE of what we believe to be Syringomyelia has been sent to us from Queensland. As it presents certain unusual features, we have thought it worthy of being recorded. For the sake of comparison, we shall first give the notes of a case (hitherto unreported) which came under notice in London, and presented the classic features of the disease.

CASE I.

W. H. D., bookseller's assistant, *æt.* 27, came on 22nd March, 1894, complaining of wasting of muscles of hands.

HISTORY OF PRESENT CONDITION.—Was in good health till two years ago, when noticed a gathering on middle finger of right hand. At this time began to complain of "neuralgic pain" midway between the occiput and left mastoid process. The pain lasts a few seconds and causes him to drop his left arm to his side. It occurs two or three times a day and has persisted. Fifteen months ago first noticed wasting of palm of left hand. Did not notice weakness of hand, but saw the tendons "growing through the palm." Since that date has been under electrical treatment. Twelve months ago his grip on books with left hand became useless. Six months ago wasting began in right hand. Seven months ago he complained of weakness of left eye for a fortnight, and again six weeks ago. After the wasting commenced, he noticed that he could hold hotter things in his left than right hand.

PAST HISTORY.—No history of syphilis; married five years, two children healthy. Remembers no illness. Fourteen years in book-trade, and has lived in London suburbs all his life.

FAMILY HISTORY.—Father living. Mother died probably of phthisis. No history of nervous disease or phthisis in any other of his relatives.

PRESENT CONDITION.—Patient is a fairly well-nourished man. *Facial muscles* are not

well developed, but there is no wasting. *Eyes*: There is some lateral nystagmus on looking to the left, more marked in left eye; otherwise, eyes normal. *Lips*, rather full. *Teeth*, good. *Tongue*, moist, clean, protruded straight. *Throat and neck*, normal. *Ears*, normal. *Chest*, barrel-shaped, expansion fair and equal. *Lungs and heart*, normal.

Back: There is marked lateral curvature in the dorsal region with convexity to right; there is doubtful wasting of the lower part of the trapezius. *Abdomen*, normal.

Legs: There is no muscular wasting present; knee jerks exaggerated; *slight ankle clonus* present; *gait* is somewhat rigid.

Arms: Deltoids and muscles of upper arms and forearms are well developed. *Left Hand*: The muscles are extremely wasted; well-marked "main en griffe" is present, the metacarpo-phalangeal joints being hyper-extended while the inter-phalangeal joints are semi-flexed. He is unable to straighten the hand. The muscles of the thenar and hypothenar eminences, the adductor pollicis, the interossei and lumbricales are much atrophied. There is present tremor of the thumb and little finger. The tendons of flexors and extensors are very prominent. *Right hand*: Wasting is not so far advanced as in left hand. Can hold the hand out straight and adduct or abduct the fingers and thumb. The interossei and lumbricales are weak and wasted. The flexor tendons show prominently on the palm. There is some tremor of the ring finger.

Electrical re-actions: In first dorsal interosseus, in abductor pollicis, and in hypothenar muscles of left hand, there is no reaction to the induction coil, and to the battery current the contraction is sluggish. The thenar muscles, or at least the adductor and opponens pollicis re-act normally. The other muscles of both arms, hands and body react normally.

There is no implication of *bladder or rectum*.

Urine, 1020, neutral, n/a, n/s.

Sensation.—*Tactile* is good everywhere. *Heat and cold* somewhat impaired in left hand, arm, and side of neck, and also in patches elsewhere. (See Plate I.). *Pain*: Sensation is impaired in the same areas, but is differently distributed. (See Plate I.) In some places not only was heat not recognised, but was called cold, and *vice versa*.

CASE I.

Black areas represent total loss.

Shaded areas represent impairment.

The same tests were employed in both cases.



Heat sensation tested by test tubes containing hot water.

Cold sensation tested by test tubes containing ice.

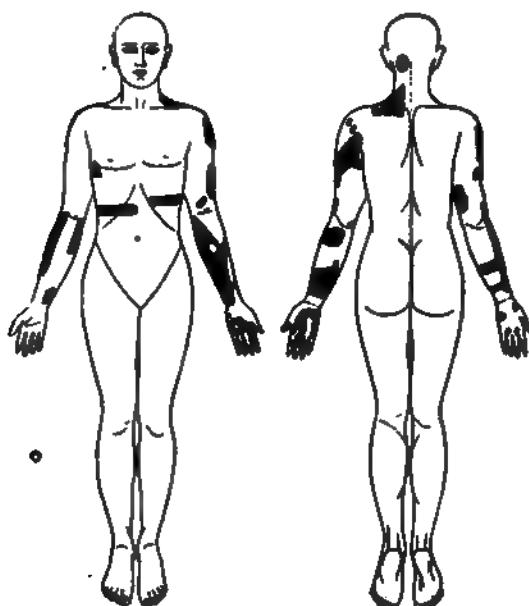
Pain tested by needle, and determining whether felt as pain or merely touch.

Tactile sense (plate II,) tested by feather for slight loss; by handle of pen for absolute loss.

Heat Sensation.



Cold Sensation.



Pain Sensation.

CASE II.

I



Pain Sensation

Tactile Sensation.

Cold Sensation

Heat Sensation

The patient was seen again two years later (in 1896). The disease had made little progress. There was slight wasting of muscles of left forearm, and the wasting was rather more marked in the right hand. He had given up bookselling, as he could not handle books well. The top joint of the middle finger of his left hand was absent, it having been amputated for necrosis of the terminal phalanx, resulting from a severe burn owing to the patient falling asleep with a lighted cigarette between his fingers, and not waking as it burnt down.

CASE II.

G. S. H., *et.* 39 years. Born London. Is unmarried. Lived in Queensland 31 years. Business manager.

FAMILY HISTORY.—*Father* died, aged 42 years, of "colonial fever"; had some spinal complaint in his childhood, and did not walk till four years old.

Mother died, aged 57 years, of "general atrophy and consumption of the bowels." Had had pneumonia and "bilious fever." Her last illness lasted three years. She was not paralysed at any time.

One brother died (accident gun shot) nine years of age. One sister, aged 37 (in good health, but has suffered much from migraine since 17 years of age).

History of phthisis and cancer in collateral branches of family. Some history of mental alienation on mother's side.

PERSONAL HISTORY.—Healthy till one year old, then fell from a cot; after this accident parents noticed external strabismus of right eye (this strabismus has become much worse of late years). Scarlet fever and acute rheumatism at 5 years of age. Pertussis and ulcerated throat at 7 years of age. "Colonial fever" at 14 years of age. Inflammation of brain from sun-stroke when 17 years of age (was confined to bed unable to walk for seven months after this illness); inability to walk was due to weakness, not to paralysis. "Muscular rheumatism" at 23 years of age, which appears to have taken the form of a condition of spastic rigidity of muscles in nape of neck, pulling head back; this lasted for several weeks; it occurred quite suddenly one day. He first felt his neck stiff, with pain over the seventh cervical spinous process. The pain radiated up over the occiput and scalp generally—was accompanied by stiffness of jaws (causing difficulty of mastication) much debility, feverishness, and constipation; the pain was worse at night; he had to wear a night-cap, as cold accentuated the pain. The nape of neck was blistered by his doctor.

Bronchitis at 24 years of age. Hæmatemesia when 30 years of age (traumatic, due to a blow on stomach). Shortly after this had what his doctor described as periostitis of right foot and leg. Dysentery at 34 years of age, accompanied by an erythema of right side of thorax, which was evanescent. Hæmatemesia (second attack) at 36 years. No cause could be elicited for this attack. Dengue and dysentery at 37 years. Influenza at 38 years.

The present illness began six years ago. Patient first noticed weakness in index finger of right hand, shortly afterwards in the thumb, and gradually the weakness extended to the muscles of the other fingers and forearm of the same side. One year ago the left hand and forearm became affected in the same way and in the same order. His condition was diagnosed as writer's cramp, and was treated by electricity. When right hand first showed signs of weakness, patient noticed "rheumatic" pains across chest and shoulders and down the arms as far as the elbows. These pains were very severe, intensified by damp cold, relieved by exercise, and have continued off and on ever since. Has a zone on trunk from nape of neck down to level of nipples, back and front, in which he has sensation of great heat. This feeling of great heat is constantly present, but is intensified by moist heat and damp cold. Has always been spare as to muscular development, but began to waste generally about three or four years since. No history of any excess or venereal disease; has lost all sexual appetite for last eighteen months.

PRESENT CONDITION.—Patient is much emaciated, wasting being most marked in thorax and upper extremities. Nothing abnormal was detected in heart, lungs, liver or spleen.

Urine = sp. gr. 1020, acid, and presented nothing abnormal, macroscopically or microscopically.

Knee jerks are much increased in both legs. Sup. patellar reflex is present on both sides. Ankle clonus is obtained in left foot, not in the right foot. Plantar reflex is obtained in left foot, not in the right foot. Cremasteric reflex is absent (large varicocele present). Epigastric reflex could not be obtained. There is no increase of tendon reflexes in the arms. No spasticity or rigidity of limbs. No Romberg's symptom.

Rectal and vesical functions are normal. Tache is easily obtainable on trunk and limbs. Has some aching in extensor muscles of thighs on waking in the morning. Feels sometimes as though walking on wool or feathers. Has no difficulty in moving about in the dark, and can

wash his face without losing his balance. Cannot lace boots or button clothing without looking at what he is doing (apparently due to impairment of tactile sense). Has slight incoordination in walking. Fibrillary tremors are present, and are most marked in the muscles of the thorax.

There is marked lateral curvature of spine, convexity being to the left.

Bullæ are present on the hands, varying in size from a pea to a large French bean; they are painless. These bullæ commenced to form five or six years ago, usually last three or four days, and heal spontaneously without cicatrization.

Right Eye.—Marked ptosis is present. Superior, inferior, and internal recti are paralysed. Pupil is moderately dilated and irregular, and does not react to light or accommodation. There is marked external strabismus. Reading accommodation is lost. Distant vision is good. Fundus is normal in both eyes.

Right hand and arm: "Main en griffe." Fingers flexed, cannot be voluntarily extended. Thenar and hypothenar eminences much atrophied. Flexor tendons clearly visible. Marked wasting of interossei. Third, fourth and fifth digits can be flexed. First finger cannot be flexed. Thumb cannot be flexed, opposed or adducted, but can be abducted. There is much atrophy of arm and forearm. Flexion, extension, pronation and supination of arm are good.

Left hand and arm: Wasting not so marked as in right hand; some flexion of third, fourth and fifth digits when hand is at rest. Apposition of thumb to little finger weak but present. Extension of digits fair except for little finger. Thenar and hypothenar eminences somewhat atrophied. Flexion, extension, pronation, supination are good.

Reaction to faradic electricity of right hand and arm is lost in thenar muscles, hypothenar muscles and lumbricales, also in the flexor sublimis digitorum and flexor longus pollicis.

Reaction to faradic electricity of left hand and arm: Palmar interossei, not obtained except in case of index finger; lumbricales?; thenar muscles react; hypothenar muscles do not react.

Some wasting of upper border of left trapezius and the clavicular portion of left sterno-mastoid.

Reactions to Galvanic Electricity.—Right hand and arm: Thenar, hypothenar, lumbricales and interossei do not react.

Flexor carpi ulnaris	..	ACC > KCC
Deltoid	{ Front portion=normal	KCC > ACC
	{ Posterior =	ACC > KCC
	{ Outer =	ACC > KCC

Left hand and arm: Thenar muscles normal. Hypothenar muscles show no qualitative change, but require great strength of current to make them react.

Deltoid	{ Front portion=normal	KCC > ACC
	{ Posterior =	ACC > KCC
	{ Outer =	ACC > KCC
Left pectoralis major	=	ACC > KCC

Trapezii and sterno-mastoids are normal.

Sensory Functions.—For disturbances of these *vide* charts (plate II.).

REMARKS.

Case I. conforms to the classical type of the disease, presenting as it does atrophy of the muscles (Aran-Duchenne type), lateral curvature of spine, increased knee jerks, and implication of thermal and pain sensations, tactile sense not being involved. In Case II. tactile sense is implicated, this symptom being the only one which raises the question of accuracy of diagnosis.

The diagnosis in Case II. appears to lie between (1) progressive muscular atrophy, (2) amyotrophic lateral sclerosis, (3) cervical pachymeningitis, (4) polyneuritis, (5) disseminated sclerosis, (6) leprosy, (7) neoplasm, (8) Morvan's disease.

Progressive muscular atrophy and amyotrophic lateral sclerosis may be excluded by the implication of sensation present.

Cervical pachymeningitis could give rise to muscular atrophy and sensory disturbances, but the affected sensory areas would be co-terminous, while in this case the diagrams shew that the affected areas vary widely. The duration of this case and absence of severe pain are additional points of value in the exclusion of cervical pachymeningitis.

Polyneuritis may be excluded by the distribution of the muscular wasting, and by the dissociation of the areas of sensory affection from one another, and from the areas of muscular atrophy (*vide* Plate II.).

In neoplasm of the spinal cord one would expect more prominent symptoms of irritation prior to the development of atrophy. The only situation in which a growth could produce the symptoms of this case could be in the central grey matter of cord. The duration of our case renders this supposition unlikely. The possibility must be admitted of such symptoms as are presented in this case being due to a patch of sclerosis occupying the grey

matter of the cord in the cervical region, but the presence of a solitary patch of sclerosed tissue affecting only the grey matter of the cord in the cervical enlargement is unlikely.

At first sight there is some superficial resemblance between lepra anæsthetica and the case shown to-night. In both we find anæsthesia and muscular atrophy, but in the case under consideration there is absence of nerve-thickening, of prodromata, of zones of hyperæmia surrounding the anæsthetic areas, and of mutilation. Further, the distribution of impairment of thermal, tactile and pain senses is incompatible with the presence of lepra as a cause for the symptoms presented.

In Morvan's disease (cases of which have frequently been confused with syringomyelia) we find severe phlegmonous dactylitis, which is progressive (the bullæ in the case under consideration heal speedily and spontaneously). In Morvan's disease, also, arthropathies are said to be more common, and muscular wasting is not so pronounced and is not progressive.

The symptoms in the case shown to-night seem to be best explained by the supposition that it is a case of syringomyelia or gliomatosis of the spinal cord, in which the lesion is situated in the cervical enlargement.

It differs from Case I. in two points:—

- (a) Involvement of tactile sense.
- (b) Occurrence of reaction of degeneration in certain muscles.

Though unusual, tactile anæsthesia has been described in several cases of syringomyelia. Until the course of the fibres conducting tactile sense in the cord is more clearly localized it would be futile to speculate as to the exact situation of the lesion causing their impairment.

The occurrence of Reaction of Degeneration in isolated muscles is not unknown in both progressive muscular atrophy and syringomyelia.

Treatment adopted in Case II. has been the use of strychnine internally, with massage to muscles of arms and trunk.

"TABLOID" KRAMERIA AND COCAINE.—The value of Rhatany in combination with Cocaine in the treatment of certain affections of the throat is well known, and has received official recognition. In relaxed sore throat, irritable conditions of the pharynx, bronchorrhœa, etc., this "Tabloid" preparation enables the physician to secure the astringent and tonic properties of Krameria with the sedative action of Cocaine. "Tabloid" Krameria and Cocaine (B., W. & Co.), possesses marked advantages over gargles, in that it is portable, and thus conduces to regular treatment. Its effect is not transitory, but continuous. It is pleasant to the taste. Is supplied in boxes of 30, and in bottles of 100.

GENITO-URINARY PAIN.

By P. CLENNELL FENWICK, M.B., M.R.C.S.,
L.R.C.P., SURGEON TO CHRISTCHURCH
HOSPITAL, NEW ZEALAND.

READ BEFORE THE CANTERBURY SECTION OF THE
NEW ZEALAND BRANCH OF THE BRITISH
MEDICAL ASSOCIATION.

PAIN due to the genito-urinary organs is exhibited over a large area of the body, and consequently a knowledge of the nerve supply, and of the nervous routes through which the sensation of pain is conveyed, is necessary if we are to accurately locate the particular organ to whose derangement the pain is due.

With your permission I will shortly recall to you the nerve supply of the abdominal cavity, with special reference to the urinary organs, as I believe that a study of their nervous connections will explain many indefinite pain symptoms.

The special areas of pain to which I wish to direct your attention are the lumbar, the sacral, and the perineal, and to demonstrate the nervous relations of these regions I have brought a rough model of the sympathetic and spinal nerve plexuses.

The sympathetic system is no longer regarded as separate nervous organisations, but is now understood to be merely the visceral division of the central nervous system, in contra-distinction to the somatic or muscular division.

In addition to the vaso-motor duties of the sympathetic, it is now recognised, owing to the researches of Head and Gaskell, that it contains sensory fibres which enter the central nervous system in three distinct segments, in the region of the head and neck, between the first lumbar and the first dorsal segments of the spinal cord, and lastly in a group extending from the fifth lumbar to the fourth sacral segment.

We are, therefore, justified in believing that an abdominal organ may, under the altered conditions of disease, set up irritation in its sympathetic nerve supply, which can be conveyed to the spinal cord, and there may be reflected to certain spinal nerves and so find expression in that part of the body, which is supplied by the particular spinal nerve receiving the reflected irritation. As an instance, let me quote the familiar complaint of "pain in the heel," which is often an accompaniment of an attack of urethritis, and which I think may be traced thus: Inflammation in the sensitive urethral mucous membrane sets up an "irritation wave" in the penile and cavernous

nerves which is transmitted to the vesical plexus, thence to the hypogastric plexus, and finally through the *rami communicantes* to the anterior divisions of the lumbar nerves, several of which unite to form the great sciatic nerve, and ultimately to supply the structures of the heel, and thus a tiny ulcer in the urethra may call attention to its presence by rendering the owner of the canal absolutely lame from pain.

The sympathetic system in the abdomen consists of two ganglionated cords which lie on the vertebral column close to the anterior border of the psoas, and two large pre-vertebral plexuses, formed by the interlacing of numerous branches from the lateral cords. The plexuses are named the solar and hypogastric, and give rise to numerous minor plexuses, which follow the course of the various branches of the abdominal aorta, and receive their names from the vessel they accompany.

The lumbar portions of the ganglionated cords contain each four ganglia, in the sacral segments the same number are found, and a final single ganglion, the "ganglion impar," receiving branches from the lowest pair of sacral ganglia, and supplying the coccygeal body, ends the series.

From each ganglion two *rami communicantes* pass backwards through the fibrous arches which form part of the psoas origin, to join the lumbar spinal nerves. In addition to this close connection, each spinal nerve on emerging from its intervertebral foramen gives off the recurrent branch of Luschka, which receives a twig from the sympathetic, and re-enters the neural canal.

The various plexuses enumerated above, receive branches direct from the spinal nerves, thus the diaphragmatic plexus communicates with the phrenic nerve on right side through the ganglion diaphragmaticum, the pelvic plexus is joined by the third and fourth sacral nerves, the hæmorrhoidal plexus receives the inferior branches of the pudic nerve, and finally the cavernous nerves of the penis anastomose with the dorsal nerve of the penis.

Having briefly described the sympathetic or visceral supply, I will merely remind you that each spinal or somatic nerve divides into an anterior and a posterior division, the former supplying the front of the body, the latter breaking up into an external and an internal branch, of which the external passes downwards to the gluteal region, the internal ends in the multifidus spinæ.

Pain in the lumbar region is due to irritation of the posterior divisions of spinal nerves, and as such may be due to direct, or reflected

causes; an instance of the direct variety being the pain due to caries of the spine, or erosion of the bone due to abdominal aneurism, whilst the aching due to congested kidneys, familiar to all who have ever suffered from a severe chill, is an example of the latter form.

Having reminded you of the close relationship which exists between the sympathetic and cerebro-spinal systems, I would like to take the urinary organs and briefly trace their individual nervous connections.

The supra-renals are supplied by the sympathetic plexus of the same name. It is derived from the diaphragmatic, solar and renal plexuses. Through the first-named it communicates with the right phrenic nerve, the small "ganglion diaphragmaticum" being the point of junction, and by its derivation from the solar plexus a connection is established with the left pneumogastric. A post-mortem examination of a case of Addison's disease shows flattening and atrophy of this nerve supply, and consequently, by recalling these nervous connections, we may be able to understand the reason of the hiccough and vomiting which so often form a prominent symptom of this disease. The distant relationship of the supra-renal nerve supply with the pneumogastric nerve, and thence with the cardiac nerves, may explain the feebleness of the heart's action, symptomatic of Addison's disease, and may throw some light on the question why injections of supra-renal extract causes an alteration in the cardiac action. Does the artificial juice seek out and stimulate those sympathetic filaments which supplied during healthy life the gland from which the juice is prepared?

The kidneys receive their nervous supply from the renal plexus, a derivation from the aortic and solar plexuses. It receives the smallest splanchnic nerve, and contributes to the spermatic, thus placing the kidney in absolute connection with the testicle, so that intense irritation in the former would be instantly advertised in the latter, and testicular pain would inform the agonised owner that his genito-urinary system was at fault.

The solar plexus lies at the level of the lower border of the twelfth thoracic vertebra, and thus we can understand why the lumbar pain due to renal derangement should be most acutely felt at the upper lumbar region, this being the level at which the spinal cord would receive its impressions from its visceral or sympathetic division and reflect it into its posterior divisions and so cause a sense of pain in the deep muscles of the back.

I have met with a great variety of chronic backache due to renal disease, and have always been able to distinguish two separate varieties in the character of the pain of which the patient complains.

Firstly, the back seems bruised, the pain is dull and throbbing, there is no stiffness, the pain does not increase on movement, nor subside on rest. On pressure the pain is not appreciably increased. The patient is unable to rest in any posture, but in many cases find most ease in the prone position.

In each case in which this character of pain was described, I found the urine scanty, high coloured, acid, and small in quantity. The patients were all small drinkers, and non-perspirers, and the pain was obviously due to renal congestion. The only successful treatment was hot baths and free drinking, with a course of saline diuretics, and although stubborn to cure I have found the above measures most successful.

In one case my patient preferred her backache to the annoyance of frequent micturition, being able to bear the pain more easily than the amusement of her lady friends.

In the second variety the pain was described as sharp, lancinating, increased on the least movement, causing stiffness, the muscles were tender on pressure, and great relief was given by complete rest. The urine was abundant, very light coloured, of very low specific gravity, and extremely acid. There was frequent micturition, due to the hyperacidity reacting on the vesical mucous membrane. The only successful remedy was liquor potasse, given in fifteen minim doses till the urine became alkaline, and I found that the pain always returned when the urine was allowed to become acid. The majority of these cases were young adults, who indulged rather freely in meat, and were also accustomed to drinking strong tea with their frequent meals. Neither heat nor belladonna gave any relief, in marked distinction to the effect of these agents on the pain of the first variety.

The pain due to renal calculus, which might have been confused with that I have just described, can be distinguished by its limitation to one side, and by its extending round to the front and down to the testicle or groin. Aneurism, cancer, and lumbar abscess are not justifiably to be mistaken for this, the simplest form of backache.

I have received the notes of three cases in which violent asthma occurred in patients suffering from hyperacidity of the urine; in one case the patient remarked that "he could

put up with the want of breath if the doctor would only cure his frequent micturition," thus giving a clue to the real cause of the asthma. His doctor tested the urine and found it intensely acid, and immediately took steps to render it alkaline, with the result that the asthma disappeared, and reappeared only when the hyperacidity returned.

If we recall the connections which exist between the renal plexus and pneumogastric nerves, we may find an explanation why an abnormal urinary secretion should have the power of originating a nerve storm in the plexuses which supply the lungs. The retraction of the testicle in certain renal cases may be understood by remembering the cremasteric nerve supply is derived from the genito-crural, and that the renal plexus is closely connected to the upper part of the lumbar plexus.

The acute collapse and intense vomiting seen during the passage of a calculus down the ureter find their explanation in the relationship between the filaments which cover the ureter and are derived from the hypogastric plexus, which also supplies the coronary and diaphragmatic plexuses by its brotherhood to the solar plexus. The hypogastric plexus lies at the level of the *fifth* lumbar vertebra, and as it is the parent of all the pelvic plexuses, we may expect that any irritation waves transmitted from the latter will be reflected to their destination, whether that be the brain, or simply the posterior nerve divisions, at this level.

Therefore, whilst the kidneys had their pain area at the upper lumbar region, the pelvic organs are allotted an advertisement area at the lower lumbar and upper sacral portion of the spine.

The bladder is covered with a delicate network of a plexus derived from the hypogastric, but consisting in large part of fibres from the third and fourth sacral nerves, and thus an immediate connection is made between the sympathetic and somatic nerves.

I have notes of two cases of bladder tumours in which the principal pain was referred to the fifth lumbar spine, but as my diagnosis is open to correction I cannot insist upon this point, but I have certainly noticed several cases of bladder irritation in which this area was indicated as the painful spot. The prostate, with its strong capsule, is surrounded by the prostatic plexus from the vesical plexus, and is noteworthy in containing several large ganglia, the "ganglia of Muller," and in supplying the cavernous nerves to the erectile structures of the penis, a communication being established between these nerve filaments and the dorsal

nerve of the penis. Perhaps this may explain why certain injuries to the spine cause continued erection of that organ.

The hæmorrhoidal plexus lies in close proximity to the prostatic plexus, and is derived from a similar source. Pain in the prostate almost invariably is advertised at the level of the fifth lumbar spine, and this may, I think, be well christened the "prostatic area." I have lately seen two cases of malignant disease of the prostate, evidently of some months standing, and in which pain has only recently become a prominent symptom, but when it did appear the termination of the case was very near. I believe the explanation is that pain is dependent on the capsular nervous supply, and till these nerves are irritated by invasion by the growth, or tension produced by its increase in size, the irritation wave is not set up.

I have, in addition to the cases mentioned, several of simple prostatic *enlargement* with but little pain, and many of prostatic *congestion* in which the pain is intense. Two of the latter cases were in young adults, and in addition I found that hæmorrhoids were present. The conjunction of these two conditions I have learnt to regard as absolutely diagnostic of masturbation, and in both of my patients the backache disappeared on successful moral treatment being carried out.

I have received notes of three cases in which, after the act of coition, a feeling of tenesmus, or urethral pain, or fainting, occurred. The explanation of the fainting seems to lie in the close relations which exist between the cardiac plexus and the sympathetic supply of the genito-urinary organs, while the tenesmus may be due to reflex irritation of the hæmorrhoidal plexus.

The severe backache of chronic constipation seems to be situated slightly lower than the prostatic area, corresponding to the uterine level, as many cases in which either uterine displacement or constipation existed, placed their pain at identical levels—the first sacral vertebra being the spot indicated.

The perineum is supplied by the perineal nerves derived from the pudic, and by remembering that its brother nerves, the inferior hæmorrhoidal, which supplies the external sphincter, and the dorsal nerve of the penis, I think I can explain an interesting case that recently occurred in my practice. To give the patients own words: "After a hot bath I felt a desire to pass water, but directly the first few drops came I was seized with an awful pain in my fork, just as if someone had forced a hot iron up my back passage." After several

attempts to relieve himself he managed to pass his water by tightly pinching his perineum. Piles were present in this case, and the prostate was large and soft. Masturbation was admitted. The passage of urine down the urethra engorged from the action of the hot bath, and also, I suspect, from an act of masturbation, started a sense of irritation in the penile nerves which was transferred to the perineal and hæmorrhoidal supply, and so caused the unpleasant sensation of which my patient complained so bitterly. This pain has twice returned, once during an attack of phosphaturia, and once after a lapse from his moral restraint.

The junction of the dorsal and cavernous nerves explain the pain felt in the glans penis in certain cases of carcinoma vesicæ, and irritation of the viscus by the presence of stone. In some cases of cancer the pain has been so agonising that self-mutilation has been performed by the sufferer, in the delusive hope of removing the pain. In cases in which surgical treatment of the bladder was impossible, would it not be legitimate to divide the dorsal nerve to relieve the pain, having regard to the parallel case of division of the lingual nerve in inoperable cancer of the tongue?

There is a curious pain which runs from the umbilicus to the meatus. I have seen three cases; in one, a female, I examined the umbilicus, and found it extended to the depth of over one inch, and had proved a veritable dustbin for dirt. I showed the patient how to clean the cavity with the domestic hair pin, and since the new era of soap the pain has not returned.

In my male patients I was quite at a loss to explain this symptom, till one of them told me that the pain never occurred unless he had amused himself by exploring the recess with his finger nail. The radical cure for this was *Punch's* matrimonial advice: Don't do it.

In the third case, I found evidence of some urethral trouble. The urachus receives a blood supply from the superior vesical artery, and therefore its nerve will probably be connected to the vesical plexus, and thus a junction will be formed between the umbilicus and the glans penis.

In conclusion, I would like to propound two questions for discussion:

Is it not possible that the so-called gonorrhœal rheumatism is a sympathetic advertisement of the urethral condition? The frequency of the left knee being selected, and the intimate relations between the anterior crural and sciatic nerves (which supply the joint) and the sympathetic plexuses, at least entitle us to

debate this question. I am, of course, aware that the gonococcus has been found in the pus in the affected joint, but was not that particular joint selected by the nerves connecting it with the diseased part?

Secondly: Catheter fever is so sudden in its development, occurs in the practice of the most scrupulously clean surgeons, and is apparently so unavoidable, that there is a great presumption in favour of a sympathetic origin. If it is due to nervous irritation passing through the urethral nerve supply, I would like to ask, has any member noticed its occurrence after the use of cocaine? I have on several occasions seen it in hospital practice, but never after having deadened the canal with this drug. I would, therefore, offer as a suggestion, that in any case in which we may suspect a tendency to nervous excitement, we should use cocaine before practising catheterisation. I have never seen an attack after a perineal section, even when a catheter has been tied in for days, and attribute this to the short length of the urethra the instrument occupies. I trust that, at the risk of tiring you, I have at least raised a few points which we may profitably discuss.

REMARKS ON CHRONIC BRIGHT'S DISEASE.

By ANGEL MONEY, M.D., F.R.C.P. LOND.,
SYDNEY.

No. I.

If these remarks are not worth making, let me, with a Shakespearian character of notoriety, be writ down an ass.

"The worst prognostic sign of chronic Bright's disease is extensive and obstinate dropsy." And there is no doubt that most practitioners are well seized of that fact, and do not forget to give a forecast in strict conformity with this dictum. I suppose ninety times out of a hundred the future realises the prognosis of the past. Yet every special work on Bright's disease contains illustrations of remarkable recovery from extensive and obstinate dropsy.

Last November I saw such a desperate case, a man, aged 46, for whom it was supposed nothing could be done. There were double hydrothorax, ascites, and general anasarca. But although no regular medicine was being taken, I found that the amount of urine passed in twenty-four hours was 80 ounces, and this made me think that the circulation of the blood was not so hopeless as might at first sight appear. I did not give a good prognosis,

but said that great improvement might occur if we could get rid of the dropsy. The anasarca was probably due to some temporary failure, partly of the circulation and partly of the processes regulating absorption and excretion. This opinion suggested itself to me because of the comparatively good action of the heart and tension in the pulse. Now (May) the man is up and about, and walked nearly a mile to my consulting-room. The way in which he got better may be briefly stated: it was not due to any pink pill or pale potion; but to an "obstinate and extensive" application of the aspirator. I aspirated the pleura about a dozen times altogether, and drew off large but varying amounts. The fluid in the right pleura was always sanguineous, that in the left clear yellow. The condition in which this patient was in November was one of extreme orthopnoea, only made worse from time to time by exacerbations of the dyspnoea; which fresh outbursts of breathlessness were controlled by hypodermic injections of morphia, freely and frequently used.

I must also express the conviction of the patient and myself that half-grain tabloids of erythrol tetranitrate gave some relief to the disturbed breathing. But the removal of the fluid from the pleura on the first occasion was followed by the most marked relief, the patient going off to sleep nearly in the recumbent posture.

The treatment of chronic Bright's disease should be chiefly directed to getting rid of the dropsy by diuretics, purgatives, and diaphoresis, is the statement made by Robert Saundby, and, I suppose, as good an authority as can be quoted in any language. I must most emphatically disagree with this advice. I do not think that sweating, purging, and diuresis are the best ways of getting rid of extensive and obstinate dropsy. In cases which I have in mind the patient is really very ill; vomiting, purging sometimes, and a foul state of the tongue, with ammoniacal breath, being conspicuous features. In such instances the possibility of ulceration of the intestines has to be borne in mind. The correct treatment is to remove the dropsy by surgical mechanical means, and by starving the patient; maintaining his ability to starve for a few days by means of hypodermic injections of strychnine and morphine.

After the dropsy is practically gone, good may result from the use of a cardiac diuretic of caffeine and digitalis.

The patient above mentioned has not lost all signs of chronic Bright's disease; the urine

still has a low specific gravity, still contains casts, and generally has a little albumin in it. The arterial tension is good; there are no retinal changes. The case cannot be regarded as a permanent cure, and I do not suppose that any real case of chronic Bright's disease ever was absolutely cured yet. Nevertheless, a practical cure is often effected, and patients may live many years. These facts, that chronic Bright's disease may recover to all intents and purposes, and that life may be enjoyed, do not appear to be sufficiently realised by some members of our profession. I could mention many illustrative instances, but let one suffice. In October, 1894, a man, aged 50, consulted me on account of many morbid sensations: Chilliness, pains, flushings, weakness, languor, and the like. So bitterly did he complain, although he looked the popular picture of health—fat and rosy,—that I thought he might be a woman suffering from the menopause neurosis. He told me, however, that he was suffering from chronic Bright's disease, and produced a specimen of his urine for examination. There was about one-sixth of albumin and many casts, hyaline, wide and narrow, were easily found in the deposit. The specific gravity of the urine was 1,030, and although I have examined many specimens of his water the density has never been below 1,025. The daily output of urea has never been less than 500 grains of at least half-a-dozen determinations. The body weight is 12 stone. There is no sign of heart disease, no evidence of high arterial tension, and there are no retinal lesions.

It is now nearly five years since, and yet the man's health and urine are much the same to physical examination. He says he is much better, does not get the chills and pains so frequently. There has not been any strict dieting; he has been told to live on as little food as he can conveniently do with, and not to take more than six ounces of butcher's meat a day. I refer to this case only because the previous medical opinion had been chronic Bright's disease, and "you haven't a year to live."

I must briefly refer to the case of a widow, aged 28, and the mother of a child aged 8. She became albuminuric during the pregnancy of her child, and has remained so ever since. The albuminuria is never less than one-sixth, and generally greater than one-fourth. The daily quantity discharged is 50 ounces; the specific gravity not above 1,014. There is no hypertrophy of the heart, and no increased arterial tension, and no retinal lesions. There was marked dropsy two years ago, and she was kept in bed entirely for five months.

There has been no anasarca since; she is anæmic, but not very—probably about 60 per cent. of red blood discs and hæmoglobin. She has not suffered from headache or other nervous uræmic symptoms, and declares that as a rule she feels well, and is able to do her duty—parlourmaid. What sort of Bright's disease is this, which takes eight years to so little reduce the general health?

MULTIPLE MYOSITIS

BY R. R. HARVEY, M.B., CH.B., NORSEMAN, W.A.

I HAD just been reading the recent article in the *British Medical Journal* on Multiple Myositis when, on visiting the hospital, I found a typical case of the disease waiting for admission. C.J., miner, *æt.* 55, had been suffering from rheumatic shoulders some months, but the last 14 days had been very bad and was three days getting to the hospital from his camp a few miles away.

Both shoulder joints were stiff, and the arms could not be raised to the horizontal position and were painful to move or touch. The deltoids were wasted, flattened and flabby, and their fasciculi separated so as to produce grooves. The whole of the skin was flabby. On passing a tenotomy knife down on to the humerus near the deltoid insertion, the bone was found to be much roughened as in periostitis. A prolonged search for bacteria in the fluids drawn from the affected tissues gave a negative result.

He was first placed on iodides, and then on salicylate, both being useless if not injurious. On March 1st he developed stomatitis with great swelling of the mouth, salivation and fætor, pain up the side of the face and sleeplessness.

On examination, he was found to have a large linear ulcer on the under lip corresponding to the dental edge of the lower gum, and all the teeth were loose. He had suffered for many years from gingivitis. The ulcer was covered with a false membrane of a dirty white colour. On microscopical examination a bacillus was found to exist in the cells of the membrane, which were packed with it. The stomatitis was followed by a serious relapse of the myositis. He was placed on ammoniated tincture of guaicum and a mouth wash of chlorate of potash, etc., and immediately began to improve in all respects. On March 27th he was discharged, at his own request, pretty well; mouth well, teeth firm, eating well, and the shoulders well but a little stiff.

INFANTILE GASTRO-ENTERITIS.

BY GERALD E. CUSSEN, M.B., ET CH.B.
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I MUST crave your indulgence for bringing such an everyday subject as gastro-enteritis before you this evening, but it is such a very common, and, at the same time, fatal disease during the summer months here and elsewhere, that I thought an exchange of ideas about it might assist us, and, perhaps, enable us to save many a young life; and though rare diseases are instructive and very interesting, still it is as well occasionally to discuss the common ones, and see if our armamentarium is in proper order to cope with the enemy. During the months of December, January, February and March, this disease is the *bête noir* of the general practitioner, and to my mind there are no cases so unsatisfactory to treat, not only on account of the disease itself, but (and here is the principal trouble) on account of the difficulty to secure intelligent co-operation from those who have the care of the infants in their hands. There is nothing more disheartening and annoying than to find cases going wrong, simply through the neglect of those in charge to attend to details of dieting, etc., laid down by the doctor. Mothers are bad enough to deal with, for it is very seldom that they will obediently observe the minutiae so essential to the proper treatment of a case; but the greatest bugbear the doctor has to deal with is the licensed nurse, who professes to know so much, and whose ignorance is deplorable. Her sole claim to experience very often rests on the number of fatal cases she has had. Most of them imagine that they are much more capable of knowing how to properly feed an infant than a doctor is, and it is through their ignorance and neglect that many lives are sacrificed. When any of these boarded-out children are brought to me for treatment, I generally anticipate having to sign a death certificate in the end. The boarding out of infants for a lump sum (generally a small one) is to my mind a most objectionable practice, and is, undoubtedly, an incentive to a woman (whose conscience is sufficiently elastic) to so neglect the infant, that she won't lose anything by the transaction. This practice should be stringently put down by legislation, and the law put into force to prevent it.

In my paper to-night, time will not permit me going into the subject very fully, and I must necessarily omit much that should be included. I propose only briefly to deal with those cases

that occur amongst artificially fed children during the summer months.

Etiology.—In this form of infantile disease the alimentary canal contains myriads of bacteria, and some of these are capable of producing powerful poisons. They grow readily during the summer months, and thus it is, as we have all noticed, after a burst of hot weather when the temperature stands at 90° or over for days that there is a marked increase in the number of cases. The best culture medium for their development is milk, hence the reason that they so readily are introduced into the alimentary tract of infants. To prevent this, great care must be exercised to prevent the milk becoming infected, or if it should unfortunately be infected, to destroy the organisms. These organisms grow in the milk both before and after it has been taken by the child, and produce certain poisons which are particularly dangerous to infantile life. I propose to divide the disease into acute and subacute milk infection.

ACUTE MILK INFECTION.

(Cholera Infantum).

Occurs during hot weather, and is caused by germs gaining entrance to milk, and there producing poisons. If these organisms are in sufficient quantity symptoms of acute poisoning at once come on. These are vomiting and purging, pallid countenance, sunken eyes, etc., in fact all the symptoms of collapse, and the child may die in a few hours. The stomach rejects all its contents, and soon mucus tinged with bile is thrown off. The ejecta from the bowel are at first fecal, with particles of undigested food, then become more watery and copious, and afterwards are almost entirely composed of blood serum. The odour is unpleasant. The child loses flesh very rapidly, and soon sinks into a state of profound exhaustion, skin cold and clammy (though the temperature in the rectum is elevated), pulse weak, thready and frequent; respirations shallow, irregular and quick; great thirst; abdomen generally retracted. In some cases the temperature becomes subnormal with fontanelle depressed, weak pulse, scanty or suppressed urine, etc.

Treatment.—In treating these cases I absolutely forbid all milk, and then endeavour to remove as much of the poison as possible by washing out the stomach and bowel with warm water, using a syphon. Having done this I give gr. i-ii. of calomel, with the object of acting on the contents of the small intestine. If necessary I repeat the washing of stomach and bowel. If the vomiting stops some stimulant

is necessary—and whisky and cold water in small quantities act well. When the vomiting has stopped for a day small quantities of meat broths are allowed, but no milk for several days. If the temperature is very high an ice cap or cold sponging with friction is ordered. The diapers are ordered to be changed frequently and disinfected, and the attendant should also keep her hands clean.

Drugs are not much use, at any rate, during the acute stage.

SUBACUTE MILK INFECTION.

This is caused in the same way as the previous disease by germs gaining entrance to milk, but the poisons produced are not so powerful. The symptoms you are all too familiar with to require detailing here. Complications are common, the most frequent being broncho-pneumonia. In chronic cases where the nutrition is much impaired tuberculosis is sometimes developed.

Treatment.—When treating one of these cases I order all milk to be stopped. Instead I give meat broths, egg albumen, and cold water. The attendant is told to see that the child is warmly clad and, in suitable weather, sent out. The diapers are ordered to be changed as soon as soiled and properly disinfected. Daily sponging of the infant and attention to the attendant's hands are also insisted on. When first seen I order a dose of castor oil or calomel, followed, if there is much pain, by a few small doses of opium. With regard to drug treatment opinions vary considerably. Some authorities recommend antiseptics, others just as strongly condemn them as useless. Salol, resorcin, creosote, naphthalin, etc., etc., all have their advocates. Opiates have fallen somewhat into disuse, while astringents are apt to interfere with stomach digestion, which in the early stages of the disease is often unaffected. The number of drugs used in treatment is legion, and it would take up too much time to mention them. Personally I have had good results with salol in gr. i. doses every two or three hours to an infant one year or under, and very often I give it combined with some salt of bismuth. If there is evidence of any gastric trouble I always give small doses of calomel gr. $\frac{1}{10}$ every hour, or hydrag. cum cretâ, with perhaps the addition of small doses of Dover's powder. If the stools are very foul smelling I always give some bismuth preparation, and preferably the salicylate for its antiseptic and antifermentative properties. Washing out of the bowel and stomach, too, if necessary is a rational part of the treatment in these cases, and I have no doubt

of its efficacy. In cases of this kind I have no fixed method of treatment, as one sometimes has to ring the changes on the different drugs. I always endeavour, so far as I can, to make the person in charge attend to the diet and proper hygienic care of the child, too often, I fear, with poor success.

But important though the question of treatment is, far and away beyond that is the question of phophylaxis, and the problem is how is this to be brought about?

I think that in the big centres, at any rate, a well-salaried medical officer should be appointed, whose sole duty should be to attend to hygienic matters. It is not necessary now to go into all his duties in detail, but included in them should be the inspection of dairies, and the houses containing boarded-out infants, and see that the hygienic surroundings are satisfactory. At present this is supposed to be done by the police or certain committee of ladies. This form of inspection is only a farce. The officer of hygiene should inspect the milk and vessels containing it if necessary, and see that the former is free from micro-organisms, and that the latter are clean. He should also see that the houses are properly ventilated and hygienically satisfactory, which I venture to say none of them are. His duties should also, as I say, comprise the inspection of dairies, and I am quite sure if these duties were properly carried out that the death rate from infantile gastro-enteritis would be very considerably decreased. In properly managed dairies the cows should be healthy, and their udders and the hands of the milkmen well washed before milking. Cows should be well fed, and allowed only to drink pure water from a running stream if possible. In summer the milk should be at once placed in a cool chamber, and when delivered should be kept in a clean place of low temperature. How often is this done?

I am only detailing some of the duties of this officer, and contend that if a capable officer were appointed at a good salary it would be money well spent, and would result in the saving of many infants' lives; and assuming that each infant represents a valuable asset to the State, the money spent in so saving them would be repaid tenfold. When it is realised that over 60 per cent. of the deaths in young children is caused by bowel troubles, every effort should be made to show how serious a menace it is, and how the mortality might be considerably minimised by proper State supervision.

Another matter that appears to me to require attention is the method of milk supply. In a

large city of this kind it is ridiculous and criminal that there is only one delivery per day, because during the summer months it is almost impossible, even with the most scrupulous care, to keep the milk free from chemical changes, and when this precaution is carried out in a very perfunctory manner, as it is, in many of the homes of the poorer classes, the results are not difficult to foresee. I think this is a question of such importance that I would suggest that this society should move in the matter, and, during the summer months, at any rate, impress on the powers that be the absolute necessity of a double milk supply per day. As it is now, the cows are milked over night, the milk is delivered next morning, and there is no further delivery till the following morning, thus the milk has to be kept at least 36 hours, and in some houses where the hygienic conditions are bad chemical changes must of necessity take place, with disastrous results to young lives. In Melbourne some time back the medical societies interviewed the authorities *re* the weekly half-holiday of milkmen when there was only one delivery, and pointed out what a source of danger it was during the hot months. How much more so must it be with us here? They were met with the reply that in Ballarat and Bendigo there was only one supply per day, and people were satisfied with the existing arrangements. I submit that we, as custodians of public health, should point out that the present system is not satisfactory, and strengthened, as we would be, by the co-operation of the Melbourne and Bendigo societies, our opinion should carry some weight.

I have only dealt in a general way with the subject of my paper for fear of wearying you, but my principal object in writing it was to get your ideas *re* the question of milk supply, and that of boarded-out children, and, in addition, what method of treatment you have found most successful.

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A NEW METHOD OF SUTURING THE PERITONEUM.

By **HENRY M. O'HARA, F.R.C.S.I., SENIOR**
HON. SURGEON TO THE ALFRED HOSPITAL,
MELBOURNE.

I HAVE always had a very high opinion of the stretching qualities of the peritoneum, as, for instance, in the case of a hernial sac.

The suturing of the peritoneum by the methods at present in vogue invariably invite adhesions to form with the parts beneath, whether it be a coil of intestine or a piece of omentum, and every surgeon who has had much experience in abdominal work can trace after troubles to this cause.

I have re-opened the abdomen on many occasions for the cure of ventral hernia, also in urgent cases of acute intestinal strangulation, and have invariably discovered some adhesions. To avoid this serious complication I have hit upon a method that I think will reduce all chance of adhesions to a minimum; in fact, I don't think adhesions could form where my method was carried out properly.

Having exposed the peritoneum, I make a small incision, say three inches in length, through it, and, should I require a larger opening, by stretching gently with the index finger of each hand hooked into the opening, the membrane will yield. Should it not stretch sufficiently it can be divided with scissors.

Having completed the intra-abdominal work, I bring the peritoneum together by means of a purse-string suture, commencing at the centre and working round at a distance of $\frac{1}{8}$ to $\frac{1}{4}$ of an inch from the cut surface. The ends of the sutures are now pulled tight, and the peritoneal opening closes, leaving the raw surface puckered up external to the abdominal cavity. The muscles and aponeurosis are then approximated with interrupted sutures, and the skin treated by the subcuticular method. The longest incision I have treated has been eight inches, but the ease with which it came together leads me to believe that a much larger one could be so treated. I have adopted the method after the removal of ovarian tumours, after hysterectomy, appendicitis, operations on the gall bladder, and pylorectomy—in all with perfect success, and I have not seen any untoward symptom arise.

The chief points which I claim for my method are:—

- 1st. Freedom from adhesion to intestine.
- 2nd. A stronger abdominal wall to resist post-anæsthesial vomiting.

3rd. A complete barrier to any leakage of blood or pus from the more superficial structures.

4th. Simplicity of technique.

In conclusion I bring this method before the surgical world after having thoroughly tested it, and with perfect confidence as to the result.

A CASE OF GANGRENE OF THE CÆCUM.

BY H. CRITCHLEY HINDER, M.B., CH.M. SYDNEY,
AND D. GWYNNE-HUGHES, L.R.C.P.,
R.C.S. EDIN., SYDNEY.

THE patient whose history we are about to relate was under the care of Dr. Gwynne-Hughes, and was sent by him to Prince Alfred Hospital, where Dr. Hinder had charge of him till he died.

Six years ago he was attended by Dr. Hughes for gangrene below right malleolus. A good deal of the tissues sloughed, but he made a fair recovery. At that time the symptoms were pains in the knees, and especially in the left ankle, which was swollen and very tender. Temperature, 101° to 102°. The pain and swelling disappeared from the left leg and continued in the right with the result above described. There was no sugar or albumen found in his urine.

His father had lost a portion of his foot from the same cause.

The history of the last illness is as follows: The patient consulted Dr. Hughes on March 13th for pain in the region of the liver just above the umbilicus, and to the right. He was very much jaundiced. His bowels were quite regular. At 8 p.m. March 15th Dr. Hughes was called to see the patient, and found him very ill, with constant vomiting, mostly frothy, great pain in the lower part of the abdomen, no temperature, pulse 104°, small and wiry. There was no swelling and no dulness in the abdomen. An opiate was administered. Next day the patient felt better, but the vomiting continued. On the 17th there was some swelling in the supra-pubic region, with marked resistance. On the 18th the patient was sent to Prince Alfred Hospital. He was urged to go on the 17th, but failed to do so. At no time before admission was his temperature noted as above normal. Pulse was 128 on the day of admission, and vomiting had been fairly continuous, but had no fecal odour about it. Aperients at first, and enemata later on, had failed to relieve the bowels.

On admission to Prince Alfred Hospital his temperature was 101° and his pulse 128. He had taken very little by the mouth for some hours past. There was frequent belching up of flatus and occasional vomiting. In every instance vomiting followed immediately after severe colicky pain. The abdomen was not markedly distended, but was very tender and rigid over the lower part towards the centre and right side. Slight superficial dulness was present over this region. A large enema of olive oil had no effect in relieving the bowels.

The patient was prepared in the usual way, and the abdomen opened a little to the right of the middle line. Immediately there flowed from the wound about four ounces of ill-smelling dirty fluid. On enlarging the opening, the cæcum was discovered bulging upwards and enormously distended, being about eight inches in diameter. The lower part of the ascending colon was bent in such a way that the junction of the ileum with the cæcum was on a level with the umbilicus, and this position was allowed to a marked extent by the presence of a cæcal mesentery. The distension did not extend far up the ascending colon, and this was markedly due to the flexion kinking the colon. The ileum was moderately distended, but it was not possible to force the gas from cæcum to ileum without some manipulation. The ileum was quite healthy. For some ten inches from the ilio-cæcal valve along the ascending colon the bowel wall was very dark, and presented three patches of absolutely gangrenous intestinal wall. These patches were irregular in shape, and were situated at that portion of the lumen which was farthest distant from the mesenteric attachment. This feculent material was oozing from numerous small openings in one of the gangrenous patches. The appendix was normal. The patient's pulse was 160, and he appeared to be fit for very little. The whole of the gangrenous bowel was drawn from the wound and left there. An opening was made and a large tube inserted, which immediately allowed the escape of a quantity of thin fæces. The whole abdomen was freely flushed with several quarts of salt solution. Gauze was packed round within the wound, which was partially sutured. If the patient rallied it was our intention to remove the cæcum, and re-establish the continuity of the bowel.

The patient improved that night, but next morning his pulse slipped along more rapidly. He breathed with effort and moderately quickly. Mentally he remained extremely

bright and alert between snatches of drowsiness up to one or two hours before death, which was due to septic absorption. A few hours before death we looked at the wound, and found the intestine outside the wound healthy, with no extension of the black patches, but the margin of the abdominal wound for at least one-third of an inch was in a condition of moist gangrene, so that we were able to pick off pieces of his rectus muscle without causing any pain, and without producing a sign of hæmorrhage till we had dug out the muscle for the distance specified.

The case is a very singular one, and not at all frequently met with, nor were we able to discover a record of more than one case of a similar character. The symptoms were those of a gradually developed intestinal obstruction, due, perhaps, to inflammatory causes. Inasmuch as it was not possible to obtain a complete post mortem examination, it is doubtful whether there was any relationship between the attack of jaundice and the succeeding illness. The distinctly localised tenderness, and later slight distension and vomiting, indicated some inflammatory trouble, and immediately following upon this was the condition in which he was found upon admission to the hospital, a frequent vomiting in every instance preceded by sharp colicky pain, an association of symptoms which I have before indicated as invariably pointing to true intestinal obstruction. Had the patient acted on Dr. Gwynne-Hughes' advice, and entered the hospital the day before directly marked symptoms were evidenced, his chance of recovery would have been much greater.

There was no twist in the cæcal mesentery, but so enormously distended was the cæcum and adjacent ascending colon, that the colon was kinked and adherent by reason of its lymphoid adhesion to the adjacent bowel. It appeared that the gangrenous patches, whatever may have been the ultimate cause of their presence, produced a paralytic condition of the adjacent intestine. As is usually the case, there followed upon this great distension, which lifted the cæcum upwards in the line of least resistance, till it kinked and became so adherent as to become practically a huge bag filled with liquid feces and gas which was unable to pass along the colon.

It was very evident that this obstruction was released, but the frequent, almost effortless vomiting made it plain that a septic peritonitis, due to the fecal extravasation, terminated his short illness.

TWO CASES OF REMOVAL OF VERMIFORM APPENDIX.

By R. S. SHUTER, M.B., B.S., SURGEON TO PORT AUGUSTA HOSPITAL, SOUTH AUSTRALIA.

J. E. S., æt. 47, railway packer; admitted October 20th, 1898. This patient had been treated for a typical attack of appendicitis early in the year. This was said to have been his first attack. He had been laid up on that occasion for two months. Previous to admission he had for two months had a feeling of discomfort in his right iliac region, with a sharp attack of pain whenever he exerted himself. His bowels had been constipated, and he had required opening medicine from time to time.

On examination his temperature was normal, his tongue furred, and his pulse 90, regular and weak; urine normal. A hard nodular swelling could be felt at a midpoint between the umbilicus and the anterior superior spine, tender on pressure. There was marked fulness and sense of resistance outside this point and in the iliac fossa.

He was put to bed for 11 days, the part painted with iodine, and his bowels regulated with an aperient mixture. His temperature remained normal, his tongue was still furred, his pulse continued rapid, the tumour in the iliac region remained prominent and tender on pressure. An operation was decided upon.

On 8th November, 1898, under ether, an oblique incision was made in the abdominal wall about three inches long, partly over the tumour and partly over what I judged would be free peritoneal cavity. The colon was exposed and traced down to the cæcum; after a little trouble the appendix was found on the other side of the gut, pointing downwards and backwards into the iliac fossa and embedded in a mass of partially organized lymphatic exudation.

The appendix was very much thickened, and could be felt to contain a concretion. The appendix was enucleated with the finger, and removed by turning back a cuff of thickened peritoneum, ligaturing the stump, which was too much thickened to invaginate, and stitching the peritoneal cuff over with wallaby tendon. The abdominal wound was closed in layers with wallaby tendon.

The patient suffered an attack of subcutaneous cellulitis round the wound requiring a dependent incision through the skin. The wound opened up a little, but the deep layers appeared to have united, and no symptoms of localised peritonitis were made out.

He was discharged on 24th December, six weeks after operation, with a small superficial sinus, which closed in a few weeks, and has remained well and free from any pain or discomfort following his occupation as a railway packer since.

Remarks.—I should like the opinion of members as to the advisability of prolonging the incision so as to open up the free peritoneal cavity. This certainly helps one in localizing the position of the appendix. At the same time, it may increase the danger of setting up a septic peritonitis, if any pus formation has occurred.

A. M., *æ*t. 9 years; admitted 5th December, 1898. She had a history of having been ailing for several days with irregularity of the bowels, vomiting on several occasions, and pain in the stomach.

On examination the following day the temperature was 101·8° in the evening and normal in the morning. Pulse was 88 and regular; tongue a little furred. The bowels were open twice during the night and relaxed. There had been no vomiting since admission. Marked abdominal distension with tympanitis were present, with tenderness, dulness and fullness in the right iliac region. The muscles were markedly on guard, and the patient lay with the legs drawn up.

She was put on a mixture containing bicarbonate and salicylate of soda, with linseed poultices to the part, and peptonized fluid food. The patient quickly improved; the bowels acted irregularly, and required an enema on several occasions. Fifteen days after admission the patient was convalescent, the swelling on the right iliac region had disappeared. She was allowed to get up. After being up for five days, on starting modified full diet, she had a return of the previous symptoms, which disappeared under treatment. She was kept in bed for three weeks on this occasion. After three weeks in bed she was again allowed up, but relapsed almost at once. She was again put to bed under treatment, and kept there for three weeks. During this time her temperature remained normal, her bowels acted irregularly, requiring an occasional dose of cascara and rhubarb, she did not convalesce properly, her pulse kept at from 90 to 100 beats per minute, and a marked fullness remained in the right iliac region, with a prominent hard nodule in the position of McBurney's spot.

On 6th February, 1899, under chloroform, the appendix was removed through an oblique incision about three inches long. The general

peritoneal cavity was not opened up. There was localized peritonitis around the cæcum; the adhesions were not firm, and were separable by the finger. I experienced some difficulty in finding the appendix, but finally it was seen surrounded by adhesions, its origin from the gut being behind and to the outer side, its apex being adherent to the omentum in front and to the inner side of the large bowel, so that the appendix formed a firm band, constricting the larger bowel. The appendix was removed by forming a peritoneal cuff, invaginating and suturing the mucous and muscular coats of the stump, and suturing the peritoneal cuff over with Lembert's sutures, using fine wallaby tendon. The wound in the abdominal wall was closed with salmon gut sutures, passing through its whole thickness.

The operation was followed by a sharp attack of localized peritonitis, and the patient's condition for some time caused me considerable anxiety. The wound opened up slightly, but finally closed firmly with no bulging. The patient made a good recovery, and was discharged cured six weeks after operation.

Remarks.—In cases of first attacks of appendicitis:—

1. In the absence of symptoms of pus formation, I know of no definite guide pointing to the advisability of operative interference. Taken with the general unsatisfactory convalescence of the patient, I think the continued marked rapidity of the pulse more than anything else induced me to operate in both cases. Mr. Lockwood, in the *Clinical Journal* for June 8th, 1898, draws attention to the importance of this sign, viz., acceleration of the pulse in the diagnosis of inflammation of the peritoneum.

2. In the same article Mr. Lockwood points out that in cases of peritonitis the temperature should be taken *per rectum*. He mentions cases in which marked pyrexia was found in the rectum in cases which showed normal or subnormal temperatures in the mouth and axilla. Had I done so in this case I have no doubt that, instead of a practically normal temperature for the two weeks prior to operation, I should have found pyrexia in the rectum, and the patient would have been spared the after danger due to the operation being prematurely performed. At the same time the band-like condition of the appendix showed that the patient was running a constant danger of acute obstruction of the bowels, occurring at any time if they had become at all constipated.

3. In this and the preceding case a marked nodule was felt at McBurney's spot, but I do not think in either case it was actually the swollen appendix that was felt.

4. I am still undecided whether to close the abdominal wound in cases of laparotomy by single sutures or in layers. From the limited experience which I have had I should be inclined to trust to single sutures in cases where there has been subjacent peritonitis with adhesions and in cases of cholecystotomy, and reserve the more tedious method of closing it in layers where I was not pushed for time, and when a healthy peritoneal cavity had been opened.

5. During the last four years I have treated seven cases of appendicitis without operation. Four of these I have had under observation for 3½ years, 15 months, 12 months, and 11 months respectively, and know that they have had no second attack. Two reside in the north, and I am sure would have again come under me if they had had a return of the complaint. They left the hospital 12 months ago. One I have lost sight of for three years. I heard indirectly that he had kept well. This patient had had two previous attacks. All the other cases were first attacks.

NOTES ON A CASE OF CEREBRAL TUMOUR.

BY ARTHUR E. MILLS, M.B., CH.M. SYD.,
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H., the patient whose history I am about to relate, was admitted into Prince Alfred Hospital in January this year. He was a man 45 years old, in good condition. He stated that he had been ill for two years, and traced his illness to an attack of what he called a sunstroke, while working out in the sun at his trade as a carpenter. He was seized with a severe headache, which continued with more or less severity for a week. Since then, he says, at odd times a "peculiar sensation comes over him," which makes him inclined to collapse and tumble down, but up to admission he has never yet done so. His appetite has increased greatly; this marked increase of his appetite was one of the symptoms he noted most, and, thinking worms might be the cause, he dosed himself accordingly, without satisfactory results. He has noticed himself becoming much more irritable, liable to attacks of forgetfulness, but still able to carry on his work. His wife noticed that he behaved in a very eccentric

way at times, that he would occasionally become quite morose and sit apart; occasionally he complained of very severe headache. There was never any vomiting. Latterly, he has thought his eyesight was becoming a little dim.

On examination: His vascular, respiratory, and digestive and urinary systems presented nothing abnormal. His reflexes, both superficial and deep were normal; pupils reacted to light and accommodation. No paralysis nor anything abnormal in his locomotion. A fine slight tremor of hands was noticeable. There was nothing in his family history that was important, nor was there any previous history of syphilis, or addiction to alcohol, though latterly he had occasionally taken it much more freely.

These symptoms, then, an eccentric mental condition, occasional headaches, history of ravenous appetite, did not seem to us sufficient to justify any diagnosis. I thought, perhaps, by close questioning his wife, she might throw some light on the case. Accordingly, she was asked to see me one visiting day, and she stated that he had been ailing for two years. She noticed a peculiarity in his behaviour. He would at times leave off eating with his knife and fork and put his food into his mouth with his fingers. He became restless at night. Had a prolonged but not severe attack of diarrhoea previously to onset of illness. He used to take an occasional glass of whisky, but since onset of illness he has taken much more. She said that he had always been a bad-tempered man; that with slight provocation he would get into a violent temper and curse and swear very much. At birth of each child he would become very violent towards his wife, and would accuse her of being nothing but a breeding-machine, would swear fearfully. Quite suddenly she noticed a change in his behaviour. He became a particularly mild man, became silent—even morose. He would sit for long periods quietly, taking no notice of anything or anyone. Up to eight weeks before admission he had been able to work regularly at his trade; since then he has lain about. At night-time she noticed him rolling about, holding his head and complaining of his head paining. She has noticed that his memory has become very bad. He has become dirty in his habits; would appear at breakfast-table before wife and children not decently clad, and would occasionally come home with his clothes soiled with faeces. At the time she noticed these decided changes in his mental condition, he had a fit, and the wife described very well the various phases of an epileptiform

seizure. He had another a week afterwards, and since then he has had repeated epileptiform seizures; sometimes would merely fall down quite suddenly, lying quite still. After an attack the memory would be worse. Now, although she noticed this marked mental change, she assured me that he had always been a peculiar man, that the peculiarity was strongly manifested before and immediately after marriage. Before marriage, up to the wedding-day, he assured her that he had a beautiful cottage, nicely furnished, ready for her, but she found immediately after marriage that he had nothing prepared, and had it not been that she had managed to save a few pounds they would have been in an unenviable position. He would, without reason, swear violently and behave unreasonably, and, after he quietened down, would, when remonstrated with, deny that he had behaved wrongly or swore at all.

Here, then, we had history of convulsions, marked mental change, occasional headache. I accordingly asked Dr. Hughes to examine his eyes, and he informed me that there was marked optic neuritis of both eyes. With this additional evidence there seemed good reason to think our patient had a cerebral tumour, but as there were no localising symptoms it was impossible to say where. He was sent out of hospital on the understanding that he should report himself to me at my house occasionally. I watched him carefully, and noticed that the neuritis was more intense, although his vision was good. About six weeks after discharge from Prince Alfred Hospital, I noticed a slight obliteration of naso-labial folds, with less wrinkling around left eye when closed tightly, and slight drooping of left angle of mouth. I sent him into hospital again, thinking, perchance, now that this paretic localising symptom was present, that operative interference might be justifiable. There was evidently some disturbance of left facial nerve tract; possibly, as there were certain symptoms of cerebral tumour, the trouble was about lower part of Rolandic area. However, a week after admission he died during a convulsive seizure. He had had one previous attack during his last stay in hospital. From watching this seizure no further light was shed upon the case.

A *post-mortem* was held. After removal of brain, it was found that the apex and at least three-fourths of inferior surface of right temporoparietal lobe was occupied by a hard growth. This growth, on being cut into, seemed to have destroyed the cortex entirely and to

have extended into the white matter of the brain. The growth had encroached in front upon the inferior surface of right frontal lobe, mesially upon the right optic tract and the right crus cerebri. The optic tract was flattened out so that it assumed the appearance of a flattened band at least half an inch wide. I think that the pressure upon the right crus accounted for the slight paresis of the face. A section of the growth by Dr. Cosh showed it to be of the nature of a glioma.

This case is interesting from many points. It shows what an extensive area of the brain may be affected and no localising symptoms result.

The marked flattening of the optic tract would indicate considerable and long-continued pressure upon it, and yet up to the last his vision remained good. Possibly there may have been contraction of his visual fields. They were not examined.

From the time of his first admission to hospital until his death, nearly three months, he did not complain of headache.

Could it be possible that this man was an epileptic without the ordinary epileptic seizures, and that his violent outbursts, whose occurrence he would afterwards deny, were due to this condition? I cannot say.

A curious feature in the case was the marked mental change. His wife was quite pleased, and thought that his illness, which had turned him to a mild, biddable man, was certainly a blessing in disguise. Perhaps the end for both parties was the most desirable.

AN UNUSUAL CASE OF ULCER OF THE STOMACH.

By JAMES T. MITCHELL, M.D., M.R.C.S.,
BALLARAT, VICTORIA.

D. M. was 73 years of age and unmarried. During twenty years of middle life he had lived chiefly in the open air as a pastoralist, and the last twenty years had been a time of ease but by no means of indolence. On the whole, he was very temperate. For many years he had used alcoholic liquors but sparingly, and he had never made a practice of indulgence either in eating or drinking. Eighteen years ago he suffered from dyspeptic symptoms, and the advice received then caused him to be very careful in the matter of foods for the rest of his life. Avoiding solid meat almost entirely, he nevertheless took broths in quantity, on some days taking as much as was made out of one and a half pounds of meat. Five years ago he suffered from pleurisy, but otherwise he

never had medical attendance in his life. Within the last six months he began to complain of stomach discomfort, which gradually increased although never going so far as actual pain. The discomfort was sometimes before meals, sometimes two or three hours after meals, and was nearly always limited to the epigastrium. There was never any vomiting and rarely any nausea. Occasionally, especially towards the last, there was eructation of sour watery fluid, free from odour. Constipation was a marked feature for about twenty years.

He first consulted me in August, 1898, about his dyspepsia, and, from that month till the middle of November, I tried all the usual remedies without any relief. On November 14th, on examination of the abdomen, I noted that the liver was somewhat contracted, there was the slightest epigastric tenderness and there was no trace of any tumour. On November 18th, after being two days in bed, the patient twice vomited nearly a pint of fluid containing a quantity of "coffee grounds." All food was now pancreatised and given by the mouth. Dr. W. attended in consultation, and was strongly of opinion that we had to do with a malignant growth, probably a melanoid sarcoma. The viscus was washed out by means of a soft rubber tube, an Ewald's test breakfast (plain roll and half a pint of water) was given and drawn off one hour later. The stomach contents were examined by Mr. T. R. Treloar, who reported finding free hydrochloric acid and no lactic acid, and the epithelial scales were rather small in size.

There was a slight improvement in symptoms till 27th, when three pints of "coffee grounds" vomit again occurred. Mr. Treloar reported this to contain blood corpuscles, free hydrochloric acid, and no lactic acid, bile, pus or debris. Feeding by the mouth was now absolutely suspended, digested milk and meat extracts being given per rectum. Dr. G. now came in consultation, and was profoundly impressed with the probability of cancer, although no tumour could be felt. The liver dulness had diminished. As the patient was much emaciated, abdominal examination was thorough. Simple ulceration seemed the only alternative, but unlikely.

The patient was now distinctly easier; there was no discomfort or pain, and he became brighter and more cheerful, while the emaciation was less marked daily. On 3rd December food was tried cautiously by the mouth—pancreatised broth and Horlick's malted milk alternately, one ounce every four hours. About half the nourishment was thus taken by the

stomach. On 14th December about an ounce and a half of sweet bread was taken, giving rise to so much discomfort that it was necessary to wash out the stomach within twenty-four hours. The resulting fluid was clear, with some white, flocculent debris, and one fragment of sweetbread unchanged. Much prostration followed this, and the patient was scarcely able to walk across the room. The stools were very pale in colour and exceedingly hard, and were brought away by simple enemata. At this time the food by the mouth was varied in quantity, all pancreatised, and it produced more or less discomfort. At times the discomfort was so great as to call for washing out the stomach, and a noteworthy point is that the quantity of fluid drawn off was always greater than that which had been taken in—sometimes nearly a pint in excess. It was acrid, burning, and very sour when belched into the mouth. Hiccough was frequently present, and at times caused great distress.

On 3rd January, 1899, Dr. P. came in consultation, and was strongly of opinion that the case was non-malignant, but that the stomach was waterlogged in consequence of the shrunken liver. On his advice, buttermilk was given once or twice a day, and was much relished by the patient. On 10th January, for the first time, there was a large quantity of very dark-coloured blood passed by the bowel in two stools, and on the next day a similar stool was followed by fainting. Junket was now alternated with the buttermilk, and was appreciated. On the 18th there was slight acidity complained of, but the spirits were bright, while on the following day the patient was brighter than for weeks past.

During the evening, however, considerable uneasiness was complained of at the pit of the stomach, and fainting supervened. The stomach, which had been empty, was observed to be filling up, and the patient speedily collapsed. During the night, a pint and a half of blood was vomited, and the patient died of exhaustion at 6 a.m.

Dr. P. assisted at the autopsy, which showed the body ex-sanguine. On opening the abdomen, the peritoneal cavity contained no fluid, and the peritoneum was free from any trace of inflammation or exudation. The liver was shrunken to about half its normal size. Externally, the stomach presented no deviation from normal, but, on opening it, it was found to contain two pints of dark fluid blood. The rugæ were unusually boldly marked over the cardiac two-thirds of its extent, and almost absent over the pyloric third which was pale and yellowish in colour. A small round ulcer

a quarter of an inch in diameter, extending deeply into the muscular coat, was found near the pyloric end in the anterior wall at its lowest edge. A branch of the gastro-epiploic artery was here cut into. There was no abnormal thickening whatever, either of the stomach wall, pylorus, duodenum, or œsophagus as far as it could be seen, nor was there any new growth of any kind. The tiny ulcer above described was the only lesion which could be discovered to account for the long series of symptoms leading to a fatal termination.

The points to which I particularly wish to draw attention are briefly these. Considering the age of the patient, simple ulcer was extremely unlikely, although a good many such cases have been recorded; e.g., 71 years (Chiari) and 82 years (Sedgwick). The hæmorrhage which pointed to ulceration was a late symptom, first showing only nine weeks before death in a case which had already been under treatment for more than three months, and with an old dyspeptic history. The total absence of pain after food, the great amount of gastric disturbance, and the severe and progressive emaciation were unusual in ulcer. The great amount of acrid fluid secreted by the stomach was a puzzling factor in the light of *post-mortem* evidences. I have always looked upon obstinate dyspepsia in a man past middle life as strongly presumptive of malignant disease of the stomach. But in this case there had been considerable dyspepsia at 55 years of age without malignant development. It would seem to be somewhat unlikely that cancer should show itself after 70 years of age, when there had been most favourable conditions for its growth at 55. And yet, taking all things into consideration, the evidences were such that careful observers were morally certain that the case was malignant, although no tumour could either be felt or seen. It was, under the circumstances, impossible to give more than a guarded diagnosis. A few years ago the presence or absence of free hydrochloric or of lactic acid would have been taken as almost absolute diagnostic proof. Later observers have seen fit to question the theory, and thus doubt was cast upon its trustworthiness. In this case of simple ulcer, however, free hydrochloric acid was present, and no trace of lactic acid could be found by Uffelmann's re-agent in three analyses, one of which was after a test breakfast.

The impression strongly produced upon one's mind was that, no matter how clear the symptoms of gastric cancer may appear to be, there is always a possibility of error, unless the tumour can be distinctly demonstrated either to the eye or to the hand.

RUPTURE OF CANCEROUS STOMACH DURING OPERATION—PULSATING TUMOUR IN THE SUBMAXILLARY REGION—CEREBRAL ABSCESS.

By P. CLENNELL FENWICK, M.B. LOND.
M.R.C.S., L.R.C.P., SURGEON TO THE
CHRISTCHURCH HOSPITAL, NEW ZEALAND.

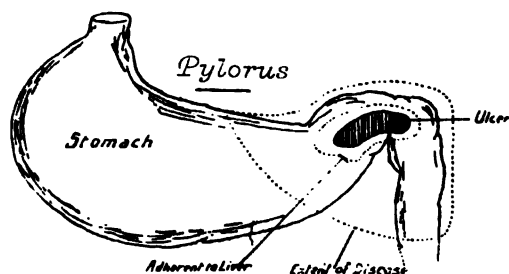
A YOUNG-LOOKING man, who gave his age as 48, was admitted into the hospital complaining of vomiting and constipation for eight days. He had no pain, and stated that the bowels had always acted badly. On examination, the patient did not look seriously ill; the pulse was good, and the only symptom of any urgency was the vomiting. The vomit was black, and smelt badly, but had not the characteristic odour of feces. He had double reducible inguinal hernia; the gastric area was somewhat enlarged, tympanitic, and on percussion a splashing sound was elicited; the bowels were moved after an enema. The diagnosis of pyloric obstruction was made, and an exploratory median incision was performed. The stomach was found much enlarged, and was adherent to the liver and other structures. The pyloric end was a mass of hard cancer, which also extended some distance behind the intestines, involving the pancreas and duodenum. As any excision of this mass was clearly impossible, it was decided to perform gastro-jejunostomy, so as to give all possible relief.

The posterior fixation sutures were inserted, and the stomach was gently brought down to meet the intestine which was lifted. Although almost no traction was exerted, a sudden gush of gastric contents appearing from beneath the liver showed a rupture of the viscus. On passing the finger gently upwards, a large circular ulcer, surrounded by a mass of hardened growth, could be detected far back and posteriorly. It was absolutely impossible to reach this opening without tearing down a mass of adhesions, and possibly inducing further destruction to the ulcerated walls of the stomach, so the operation was reluctantly abandoned. The patient died thirteen hours later.

At the *post-mortem* the following condition was found: The pylorus and first part of the duodenum was converted into a mass of scirrhus carcinoma, which extended on to the posterior surface of the stomach. At a distance of one inch from the pylorus on this surface was a large circular ulcer, having a diameter of one inch. Its earlier rupture had apparently been prevented by the adhesions which existed between

this portion of the organ and the liver. The line of rupture extended through the pyloric opening along the duodenum, and it was evident that no operation could have been performed with a view to closing the opening with the faintest chance of success.

The most interesting point in this case is the entire absence of pain or any feeling of illness previous to the last eight days, and then only did the persistent vomiting attract the attention of the patient to his condition. The extent of the growth showed that the condition must have existed for at least some months, so that it is surprising that the patient should have been unconscious of his condition.



PULSATING TUMOUR IN THE SUBMAXILLARY REGION.

C.B., aged 30, was sent to me by Dr. Brittin for operation on a submaxillary swelling. On examination, a tumour the size of a golf ball could be seen lying below the left ramus of the jaw. It pulsates visibly. On palpation it is felt to be fluctuating, tense cyst with expansile pulsation, which is most marked over the posterior extremity. It is possible to move the swelling laterally, but not in a direction corresponding to the direction of the lingual artery. Pressure around the cyst does not stop the pulsation, neither does lifting up the tumour from its position.

I felt justified in diagnosing a probable aneurism of the lingual, and advised removal. A long incision was made over the swelling, and after two hours' dissection the mass was removed. It was found to be composed of varicose veins, but whence the pulsation was derived I could not ascertain. It was certainly not transmitted, as the swelling continued to throb even when its relation to surrounding parts was changed.

The patient gave a history of a fall on his chin some years previously.

CEREBRAL ABSCESS.

M. D., was admitted into the hospital in a semi-conscious state, with a temperature of 104°. On examination, the following condition existed:—

The pupils are equal and active. Fundi could not be examined, as the eyes followed the mirror round with every movement. There is partial left facial paralysis, and the right eye is much more prominent than the left. There is apparently no paralysis of the limbs.

The history was as follows:—

Patient had a fall on her head when twelve years of age. For the last two years she has complained of headache, and lately of a sensation as if water was running over the top of her head. Has had alcoholic cravings at times. Was working in the sun when taken ill. Seven days before admission she had severe pain in her right eye, and went to bed, remaining there till now. Three days before admission she had several fits, and became semi-unconscious, in which condition she has since remained.

It was determined to trephine, a diagnosis of abscess being made.

Whilst taking chloroform patient had a fit, which began in the left hand and spread to the rest of the body. On exposing the right fissure of Rolande nothing was found, so a second trephine hole was made over the frontal lobe, and pus appeared under the dura. The temperature fell from 105°.2 to 101°, but rose next day to 105°.8, so a second trephine hole was made posterior to the frontal opening. More pus was found, but no improvement occurred, and patient died unconscious. *Post-mortem* refused. The true nature of the abscess would have been seen on *post-mortem*, but this was not allowed. I think it would be more correct to class this as a case of meningeal abscess rather than cerebral, although symptoms supposed to be prominent in both were present.

EXHIBIT.

By the permission of Dr. Moorhouse I am able to show a supernumerary mammary gland removed from the armpit. The patient was suckling, and had for some time noticed a small lump in the skin of each armpit. Dr. Moorhouse made an incision into the swelling and removed a glandular mass which was secreting milk from each axilla, and I have brought the larger one here to show you.

INTUSSUSCEPTION TREATED BY LARGE INJECTION OF WATER WHILE PATIENT WAS KEPT IN THE INVERTED POSITION.

By L. F. BUCKNELL, L.R.C.P. ET R.C.S. EDIN.,
KOGARAH, N.S.W.

V. O. R., female, aged three years three months, was brought to my surgery at 1.10 p.m., 11th March, 1899, suffering from great pain, vomiting, and passing blood.

Previous History.—Child was perfectly well and running about until a quarter to twelve, when she suddenly had severe pain which caused her to scream out; then the bowels acted, and later it was noticed that nothing but blood was passing, and also that when the pain came on she vomited as well as passed blood. There would be intervals during which child would sleep. She would awake with a scream, vomit, and then pass more blood, patient all the time looking extremely ill.

Present State.—Child is collapsed, very pale, eyes sunken, lips livid, is sleeping with legs drawn up as in pain. Child is well nourished. Palpation of abdomen reveals sausage-shaped tumour on the left side, in position of descending colon; tumour appears to be about three inches in length. *Per rectum*, can feel no tumour.

I diagnosed intussusception, and so took the child into the St. George's Cottage Hospital, Kogarah, that, if necessary, I might operate upon her. While in hospital waiting, she vomited three times and passed pure blood twice.

3.30 p.m.—Drs. McLeod and Clay saw the case with me, and were quite satisfied that it was one of intussusception. Dr. McLeod then gave chloroform, and, when the child was well under, the tumour could be very plainly felt and marked out. Then, with Dr. Clay's assistance, the child was kept in the inverted position, and a large injection of warm water given (thirteen ounces) and manipulation made while the water was being injected. During manipulation, the tumour was distinctly felt to move from under the hand and disappear. The water was now ejected, but no faeces, blood, or flatus came away with it, but no tumour could be felt. If the intussusception had been reduced, I expected some faeces or flatus to be returned with the water; but, as I noticed none, I gave another similar injection, and while manipulating felt a distinct gurgle under the hand, and, on the water being ejected, a very little faeces came away and

also some flatus. I now felt sure that the intussusception had been reduced, and so had the patient removed to bed and kept warm, where she slept comfortably. At 6 p.m. she passed a small natural motion, without pain; there was no vomiting, and child soon went to sleep again. After this the progress towards recovery was rapid, and she left hospital on the 14th quite well.

PULMONARY ANEURISM.

By W. B. VANCE, M.B., CH.B. MELB., D.P.H.
CAMB., ST. KILDA. LATE RESIDENT
PHYSICIAN, ALFRED HOSPITAL, MEL-
BOURNE

THE notes of this case are of sufficient interest to be worthy of recording.

Edward D., aged 32, a well-developed muscular man, working on a merry-go-round, was admitted to the Alfred Hospital on December 5th, 1898.

He stated that while at work the previous evening turning the handle of an "ocean wave," he suddenly felt suffocated, and almost immediately brought up a quantity of bright red blood. Before this he was in his usual state of health.

On admission, his temperature was 99° F.; pulse, 130; skin, cold and clammy. Owing to his condition only a very superficial examination was made, nothing of any importance being detected. He continued during the day to bring up a quantity of blood, the measured quantity for twenty-four hours being 67 ounces. He always knew when the attack was coming on, feeling, he said, a gurgling sensation in his chest, which was shortly followed by the blood gushing out. Next morning his temperature was 102° F. It ran an irregular course for three days, and then settled down to normal.

For some four or five days he continued to expectorate bloodstained sputum, the stools, however, not showing any trace of hemorrhage. On December 13th he had another attack of hæmoptysis, losing, however, on this occasion, only 25 ounces. His temperature did not rise above normal. He had another attack on December 21st, when he lost in twelve hours the immense quantity of 132 ounces. Notwithstanding the very collapsed condition he was in, his evening temperature was 103° F. In twenty-four hours, however, it became sub-normal.

The stools now, for the first time, showed a slight trace of blood.

From this time he gradually improved, and was discharged relieved on January 13th, 1899.

When well enough, a complete examination of his chest was made, but only some slight dulness with diminished breath sounds at the right apex anteriorly could be made out. His sputum was examined on three separate occasions for tubercle bacilli, but without result.

His family history was good. He is supposed to have contracted syphilis some ten years before. An interesting and important feature about his case is the fact that three years before this attack for some four or five months he expectorated bloodstained sputum, and was told by a medical man that he had consumption.

No doubt at this time a small vomica was formed, but the trouble became dormant. The coats of the vessels, however, having lost the support of the lung at this part, and, as pointed out by Drs. Powell and Rokitsansky, the inflammatory process causes them to become swollen, semi-gelatinous, glistening, and loose, their elasticity tend to form an aneurismal dilatation. Such must have occurred in this case.

It is a well-known fact that pulmonary aneurisms may be present without giving any physical signs. Records of such cases by Rasmussen, of Copenhagen, translated into English, will be found in the *Edinburgh Medical Journal* for November-December, 1868, and August and September, 1869; and by Powell, in "Pathological Transactions," for 1871.

Rupture in this case being brought about by the great physical strain necessary to work the "ocean wave;" the repeated hæmorrhages being due to the clot being displaced.

Treatment consisted of keeping him absolutely quiet in bed, on liquid diet, ice bag to chest. During the attacks he was kept under the influence of morphia till they ceased. Subsequently large doses of iodide of potash were administered.

THE INFLUENCE OF MODERN MEDICAL SCIENCE ON CLINICAL OBSERVATION.

By ROGER COPE, M.B. SYD., RESIDENT PHYSICIAN ST. VINCENT'S HOSPITAL, SYDNEY.

As pathological and bacteriological science slowly but surely strides along, revealing to us secrets which fifty years ago seemed scarcely to exist even in the imagination, the clinician stands aloof, and with a heart filled with sorrow and remorse gives up his independence.

I do not say that this applies to every clinician under the sun, but, nevertheless, the

fact remains, and surely every one must have observed that since the birth of the Röntgen rays, Widal's reaction, and in fact bacteriology as a whole, clinical observation has been crushed, small but important points have escaped notice, and often a wrong diagnosis has been made.

No one will deny the great help and assistance which science has given to clinical medicine, and clinical surgery, but after all it is only one wheel of the cart, and unless both revolve together, there will be no headway made, rather shall we have disorder and chaos.

It must never be forgotten that the clinician and the pathologist are just as essential to one another as man is to the air he breathes, that the opinion of the one is absolutely futile and useless without the opinion of the other, and that in order to do some essential good to medical science, each one must work his own work, and not throw his undiagnosed patient on to the fluorescent screen or jam him between an oil immersion lens and an Abbe's condenser. Let the clinician diagnose his case first, ever trying to procure fresh points to help him, and only when he has done his all, call in the aid of the pathologist or the bacteriologist, as the case may be. I feel certain that clinicians in the time of Trousseau knew a good deal more about a diphtheritic throat than we enlightened individuals do to-day. And why? Is it not that by force of circumstances they were compelled to rely on their own observation, and comparing one case with another, they were enabled to differentiate disease long before Klebs or Loeffler handled a slide or looked through a microscope.

Did not Jenner years ago separate enterica from typhus fever, while here to day bacteriologists are still uncertain of the life history of the bacterium coli commune and Eberth's bacillus of typhoid. After reading Koch's original work on the tubercle bacillus, one closes the book feeling positively certain that the discovery of tubercle bacilli in the sputum is absolute evidence that there is tuberculosis in the respiratory passages, either in the lungs themselves or in the larynx. And yet if one depends too much on this a patient's life may be lost when, perhaps, with a little more care, a little more independence, and a little more observation, a cure might be effected. It is said that more is learnt from one's mistakes than from anything else. And it was from the following case, which I shall briefly relate, that I learnt a lesson which I shall never forget. Some months ago a patient in one of our metropolitan hospitals was being treated in a surgical ward for necrosis of the jaw. At the same time he had a cough, and the chart showed

a hectic temperature with the usual evening rise and morning fall. He was eventually sent to a medical ward for treatment. His sputum had been examined and was found to contain numerous tubercle bacilli. On examining the chest no definite signs of phthisis could be made out. The man certainly looked phthisical. However, over the right lung behind the percussion note was impaired over a small area just below the angle of the scapula. Here the breath sounds were fairly well heard, but not so well as over the lung area around. As the days went by the patient's temperature suddenly rose to 104° . His respirations were rapid, his countenance was distressed, and altogether the man looked bad. He was expectorating a quantity of frothy material mingled with slime and smelling abominably. His chest was again examined, and gave every sign of fluid. A needle was inserted in three or four different places with a negative result. The patient became worse and worse and eventually died.

On an examination being made the right chest was found to be full of pus. There were no deposits of tubercle in the lungs, and yet the sputum was full of tubercle bacilli. There was nothing to indicate any disease in the larynx. If we had thought ante-mortem as much as we did post-mortem over that case we perhaps would have connected necrosis of the jaw, a tooth socket and the sputum together and placed a little more confidence in the clinical signs of fluid. Evidently the necrosis was a tubercular one, and the lung condition something quite apart. This is, perhaps, a good example of the manner in which, in a moment of carelessness, we are apt to be guided too much by the discovery of a cause without first handling every point in the case, and allowing each point its own meaning. Over and over again throats which are clinically diphtheritic when examined microscopically are found not to be so, and the reverse holds good also. I feel sure that there are many cases now held to be diphtheria which were not thought so before. Is it not true that the Klebs Loeffler bacillus has been found in a perfectly normal throat, apparently doing no harm to the individual in which it lives, merely hibernating on the flesh of its host until some disturbing influence proposes for it a suitable soil whereon it manufactures its poisons. Can we definitely say when we look at this microscopic rod that we are dealing with a foe unarmed, or one fully equipped with the implements of war. And, indeed, I have seen a man who was a good clinician and a bacteriologist as well pronounce

a case at the bedside to be non-diphtheritic, and on seeing a swabbing under the microscope pronounce it just as positively to be diphtheria.

Now let us turn to something more recent, I mean Widal's reaction—that boon to the busy practitioner—which, given a high temperature and a bit of a headache, tells him whether his patient has typhoid fever or a carbuncle on the back of his neck. It saves him the trouble of turning his patient on his stomach or looking at his tongue.

Is it not a fact that a failure of this reaction in a great majority of instances means straight-away that the patient's diet is increased: he is no longer a typhoid, the medical attendant feels less uneasy, and the nurse has less to do, as the evacuations are harmless, disinfection is not necessary, and there is no fear of infection.

And yet how often Widal fails. Not very, very often, but often enough to make us use the same care in treating a doubtful case as if it really were specific, in spite of a negative result from the bacteriological laboratory. When we think that, for a successful and trustworthy report from the bacteriologist, we must be certain:—

- (1) That the patient never had typhoid before.
- (2) That the culture is really typhoid.
- (3) That it is a recent pure culture of typhoid.
- (4) That there is no clumping in the bouillon in which it is grown.
- (5) That the case is far enough advanced to give the reaction.
- (6) That the bacillus present is sufficiently virulent to produce the reaction.

When we think of this, I say, we may justly hesitate when the report is a negative one. As a positive reaction perhaps the test is most valuable, if we can exclude No. 1 mentioned above. And so the years fly by. The quality of an abdominal tumour is settled by an abdominal incision. A doubtful sore on the tongue is mixed up with paraffin, sliced and examined. No time is given for differentiation at the bedside. And so new practitioners are born with silver spoons in their mouths. They no longer suckle at the breasts of the old masters, but are weaned on an incompatible mixture of Widal and X rays, which should really be the few little dainties given them in their riper years after having learnt for themselves from their sense of sight, touch, and smell.

I can see the clinician of the future now as I write. He is sitting alone with the

stethoscope he has fondled for years draped in black.

The electrician is telling him the number of revolutions of the inspiratory cog wheel in an emaciated chest. He tells him of the numerous hard looking patches set in a cheesy sponge, and of the many little ponds of fluid shut up in a living soil. He tells him too he can see the polished cardiac valves fringed with fungus or roughened with lime, he sees the blood rushing over these, and sees the fringes lashed in the turbid stream until life gives out.

The old clinician, the middleman between patient and scientist, interprets all these things and his work is done.

PROCEEDINGS OF BRANCHES.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE usual monthly meeting of the Branch was held at the Royal Society's Rooms on Friday evening, 28th April, 1899, Dr. L. T. Thring (President) in the chair. There were also present: Drs. W. H. Goode, Paton, Hinder, Contie, Iabister, Mills, Gordon Craig, Worrall, H. Taylor Young, Arthur, W. G. Armstrong, Morgan Martin, Scot Skirving, Magnus, Spencer, G. Goode, Neill, Bowman, Clubbe, Fiaschi, G. L. O'Neill, Binney, Flynn, Graham, Hankins, Gillies, Crago, Bennet, Maitland, Abbott, A'Becket McCarthy, Litchfield, Dixon, Gledden, Sawkins, G. Armstrong, W. O'Neill, G. H. Taylor, H. Browne, Menzies, Cooley, Walker Smith, Frizell, Chenhall, and others; visitors, Drs. R. H. Jones and Belli.

The minutes of the previous meeting were read and confirmed.

THE PRESIDENT announced the election of the following gentlemen as members of the Branch: Drs. Cosh, Ludowici, Reid, and Palmer.

Dr. THRING (the President) said, before commencing the business of the evening, he wished to refer to a matter which had arisen and had caused some perturbation to certain members of the Branch. He alluded to the editorial which appeared in the April number of the *Australasian Medical Gazette*. He believed it to be the desire of some gentlemen present that a motion should be brought forward that night touching this question, but the proper notice, which according to the rules should be seven days, had not been given. The matter had already been considered by the Council, and he therefore advised the meeting to let the question stand over at least till the following week, in order that the specified business of the evening might not be interrupted. Personally he could see no urgency in the case, and, having re-read the article, he was inclined to the opinion that some of those gentlemen who felt aggrieved at the editorial had perhaps been hypersensitive, and had taken offence where none was intended. He referred especially to the Sydney graduates. But he wished it to be clearly understood that there was no desire on the part of the Council to avoid discussion on the matter. Simply he thought it inexpedient to have the business-paper set aside for the ventilation of a matter which was not urgent.

As Dr. Sinclair Gillies and Dr. O'Neill had papers illustrated by a living exhibit, the President decided that these should be the first business of the evening.

Dr. SINCLAIR GILLIES read some notes on a case of syringomyelia. (See page 177).

Dr. GREGORY O'NEILL read some notes on a case of syringomyelia, and exhibited the patient. (See page 177).

Dr. SCOT SKIRVING thanked the authors for their full, clear, and useful papers on a disease so seldom met as syringomyelia. In the course of the last sixteen years he had only seen one case concerning diagnosis of which he felt satisfied. That case was recorded, he thought, by a former House Physician of the Prince Alfred Hospital, in "Hermes." As to the identity or non-identity of syringomyelia and Morvan's disease neurologists were apparently divided on the matter into two camps. Without expressing an opinion *pro* or *con*, he thought that Drs. O'Neill and Sinclair Gillies perhaps too easily inferred their belief in the unity of the two diseases. A good deal could be advanced in favour of the duality of the two processes. No doubt the fact that the typical cases of Morvan's malady were mainly observed in little local epidemics was a good argument against Morvan's disease and syringomyelia being the same disease, syringomyelia being a lesion of what one might call a developmental genesis, and little likely to burst forth in numbers. The most interesting question for us in New South Wales lay in the diagnosis of syringomyelia from nerve leprosy. The points of distinction touched on by Dr. O'Neill were of great importance as to the dissociation of sensory conduction. Some years ago we were inclined to lay great stress on the difference between the two diseases, but it is now quite certain that it would be unwise to regard this difference as pathognomonic, for in occasional cases of nerve leprosy the same dissociation of sensory conduction took place as was typical of a classical example of syringomyelia. That the diseases often simulated each other very closely was certain; indeed, one observer had gone the length of declaring that syringomyelia was a degenerate form of leprosy. The difficulty of diagnosis had presented itself to the speaker some years ago in the cases of two sisters similarly affected, where the diagnosis seemed to be between leprosy, syringomyelia, or a lesion as yet unclassified. As to treatment in the case exhibited, he had nothing to suggest save, perhaps, the use of the strychnine hypodermically.

Dr. O'NEILL in reply, after thanking the members for the interest they had shown in the case, gave particulars of three cases operated on by Abbé and Keen, showing that the results of operative interference were uniformly unfavourable.

Dr. ARMSTRONG asked now to be allowed to proceed with his resolution with reference to the editorial in the April number of the *Gazette* as a matter of privilege.

THE PRESIDENT took the sense of the meeting on the subject, with the result that it was decided to postpone the matter until Friday, 5th May, when it would be discussed at a special meeting of the Branch.

Dr. W. G. ARMSTRONG gave notice of the following resolution,—"That this Branch of the British Medical Association ask the Council to entirely disavow the editorial which appeared in the April number of the *Australasian Medical Gazette*, reflecting on the teaching staff and graduates of the Sydney University, and that this disavowal be published in the columns of the *Australasian Medical Gazette*."

Dr. ARTHUR MILLS read some notes on a case of cerebral tumour. (See page 194).

Drs. GOODE and IABISTER exhibited some samples of the serum diagnosis of typhoid fever by means of

the dead cultures of the bacillus typhosus, also the vaccine or inoculation fluid against typhoid.

Dr. SINCLAIR GILLIES asked Dr. Goode and Isbister whether they found the sedimenting test reliable. About three years ago, when Widal's reaction was first introduced, the late Dr. Kanthack made an exhaustive series of experiments at St. Bartholomew's Hospital to test the reliability of the sedimenting test as described to-night by Dr. Goode. He found that though the reaction occurred in well-marked and undoubted cases of typhoid, it often failed in just the doubtful cases in which it would be of most service, even in cases which gave a well-marked agglutinating reaction under the microscope. It was therefore abandoned as not being sufficiently delicate to be of much diagnostic value. The dilution (1-10) used in these cases was not sufficient to prevent fallacy arising from the agglutinating and sedimenting power of normal serum.

Dr. SINCLAIR GILLIES said that although Widal's test was satisfactory in pronounced cases, it was not by any means conclusive in the numerous cases of a doubtful nature, especially as the reaction would not take place in some cases until weeks after infection, or until the need for such assistance to diagnosis had passed away.

Dr. ISBISTER stated that the dead bacillus seemed to be as efficacious a test as the living, and would be of great service to practitioners in the country, where fresh cultures could not be obtained.

Dr. W. H. GOODE, in reply to Dr. Sinclair Gillies' question, said he could only point to the sedimentation tubes and say that they had never found sedimentation absent when dead cultures were brought into contact with serum from a patient suffering from typhoid fever.

A special general meeting of the Branch was held at the Royal Society's Room on Friday, 5th May, 1899, at 8.15 o'clock, to consider Dr. Armstrong's motion re the editorial reflecting on the medical school of the Sydney University. Present: Dr. E. T. Thring (President), in the chair, Drs. W. G. Armstrong, Knaggs, Flashman, Reading, Stokes, Shewen, Mills, Service, Hankins, F. H. Quaise, Ludowici, Traill, G. A. Marshall, Hinder, Blackwood, Fiaschi, Lockley, W. S. Brown, Stevenson, Coutie, Crago, Gordon MacLeod, Pain, Tidswell, Gledden, Marano, Arthur, Dixon, Binney, Todd, Clubbe, F. W. Hall, J. A. Dick, Maitland, Worrall, West, Sinclair Gillies, Neill, A'Becket McCarthy, Sawkins, Taylor Young, and others; visitors, Drs. McMaster and Brennand.

The PRESIDENT said that he would first ask Dr. Hankins to read some notes which he had prepared with reference to the relations of the editor of the *Australasian Medical Gazette* towards the Council of the Branch, and would then read out to the members a resolution passed by the Council the previous evening, when they had the matter under their notice. He hoped this resolution would prove satisfactory to the meeting, and would perhaps render a long discussion unnecessary.

The HON. SECRETARY (Mr. Hankins) read the following notes:—

The articles of association bearing on the matter are 57, 58, 9, and 27.

The editor of the journal is not an officer of the Association.—Rule 27.

The editor is designated or appointed by the members, but the duties, powers, etc., of the editor are determined by the Council. He is paid by the Council. His services may be

dispensed with by the Council. If he were dismissed by a vote of the general meeting, and the Council took no steps to dismiss him, he would be still entitled to his salary until dismissed by the Council.

The editor once appointed has no relation to the members, and cannot answer them even at the direction of the Council.

In point of fact, the editor is the servant of the Council, and the Council are answerable to the members for his actions.

Rules 57 and 58 impose the duty of management upon the Council.

The clause in rule 9 having reference to the responsibility of the editor does not apply so as to relieve the Council of any duty to the members, and the Council must answer to the members for any alleged defective work of the editor.

In reference to the clause in rule 9, which is as follows, "A journal shall be conducted by an editor, who shall be responsible for all that appears in its pages, except such matter as may be printed by the direction of the Council," this could only apply in a matter between the Company and a member of the public; as, for instance, in an action for libel, or action for damages for breach of advertising contract.

The action would be brought against the Company. If the Company were unsuccessful in defence, and the matter did not come within the exception referred to, the Company could recover the amount of the judgment debt and costs from the editor.

The PRESIDENT said that this explanation of their position made the duty of the Council perfectly clear, and the result of their discussion the previous evening was embodied in the following resolution:—"With reference to the editorial in the April number of the *Australasian Medical Gazette*, containing reflections on the teaching staff of the Medical School of the Sydney University, the Council wishes to state that this article does not express the opinion of the Council, and that the Council regrets its publication."

Dr. W. G. ARMSTRONG said after the statement by the President, it did not appear necessary for him to make any remarks, but he would simply move the following resolution,—"That this Branch of the British Medical Association ask the Council to entirely disavow the editorial which appeared in the April number of the *Australasian Medical Gazette*, reflecting on the teaching staff and graduates of the Sydney University, and that this disavowal be published in the columns of the *Australasian Medical Gazette*."

Dr. ARTHUR MILLS seconded the resolution.

Dr. FIASCHI thought it would be impolitic to attempt to stifle fair criticism on the working of the University, and he said this as much in the interest of the graduates themselves as of the medical profession generally. He would therefore prefix certain words as an amendment to Dr. Armstrong's motion, which would then read as follows,—"That this Branch of the British Medical Association, whilst reserving its right and that of the medical press to discuss and criticise the doings of the Sydney University, ask the Council to entirely disavow the editorial which appeared in the April number of the *Australasian Medical Gazette*, reflecting on the teaching staff and graduates of the Sydney University, and that this disavowal be published in the columns of the *Australasian Medical Gazette*."

Dr. KNAGGS said he was a graduate of the Sydney University himself, and had been a teacher in the Medical School. He did not intend anything offensive to the Sydney graduates in his editorial.

Drs. Armstrong and Mills accepted the amendment proposed by Dr. Fiaschi, and withdrew the original resolution.

After discussion, the amended resolution was put to the meeting and carried unanimously.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY MEETING held on Thursday, 27th April, 1898. Present: The President (Dr. Swift), Drs. A. E. Wigg, Harrold, Marten, Singleton, Shuter, Good, Michie, W. A. Verco, Sprod, A. A. Hamilton, Poulton, J. A. G. Hamilton, G. C. Hayward, Morgan, Brooks, Fischer, Stewart, Jay, Gunson, T. K. Hamilton, Cavenagh-Mainwaring, Symons, and the Hon. Sec. (Dr. W. T. Hayward).

LIVING EXHIBITS.

Dr. T. K. HAMILTON exhibited the following cases:—

I. Synochia between the Soft Palate and Posterior Wall of Pharynx, and a New Method of preventing Re-adhesion and Contraction.—This patient was shown by me at the March meeting of our Branch last year. Since then the adhesions of the soft palate to the post-pharyngeal wall have been broken down and the patient has been wearing, for the past ten months, an obturator to prevent re-adhesion. This idea of the obturator was suggested to me on reading an article written by Kollbrunner, of Straasbourg, in which he recommended the application of a tube to a palatal plate, the tube to extend up into the naso-pharynx. Dr. Lundy has worked out and improved upon this suggestion for me, and has fitted the contrivance now exhibited. It consists of an ordinary vulcanite palate-plate, with clamps on each side to fix it to one of the molar teeth. Attached to its posterior border, and at right angles to the plate is an obturator, also made of vulcanite, which projects upwards into the naso-pharynx sufficiently wide and high to keep all the original synechiae apart. The device has been a complete success. The child can take it out and replace it herself; it has never caused the slightest uneasiness, and, while it keeps the parts separate, it, at the same time, allows of perfect breathing through the posterior nares, ventilation of the middle ears, etc. There is a space measuring 1.70 c.m. in its horizontal diameter, and 0.70 c.m. in its antero-posterior behind the obturator, through which a good rhinoscopic image of the choanae, etc., can be obtained. The voice is normally resonated through the nose as the child has no nasal twang, and since she has been wearing the plate there has been no return of the middle ear trouble from which she suffered before its introduction.

The application of this simple contrivance gets rid of the principal difficulties attending the treatment of these troublesome cases, and prevents the necessity of resorting to various other expedients, most of them extremely irksome to the patient and many of them of doubtful efficacy, which have been from time to time recommended for this condition.

II. Ectropion following Severe Burn of the Face—Treatment by Massage and Blepharoplastic Operations.—A. T., aged 4 years, was very severely burnt all over the face on May 24th, 1898. On November 3rd she came under treatment. There was then a tendency to ectropion of the lower lid of right eye, and a very

marked ectropion of the same lid on left eye, it being drawn down on the cheek fully 0.75 c.m.; and there was also a drawing-up of the upper lid on this side. The skin of the face was of bright red colour, tense and adherent to the deeper parts so that it could not be moved over them at all, and in various places there were densely thickened bridle-bands. Massage twice daily was the only treatment adopted for the first four months. On February 27th, a transplantation of skin from the chest by Wolfe's method was done for the left lower lid ectropion, and, on April 10th, the upper lid of the same eye was operated on according to a method lately recommended by Hotz. It is to draw attention to the efficacy of massage in connection with this latter operation that the case is now exhibited, the real interest of the case centering in the fact that scar-tissue can with advantage be utilized in blepharoplastic operations if only such operations are preceded by a prolonged treatment of the cicatricial skin by massage.

In the Archives of Ophthalmology 1896, an article, by Hotz appeared* in which he refers to the opinions of the authorities for the most part generally accepted, that scar-tissue should not be included in skin-flaps, and combats these statements by showing how, that in its original condition cicatricial tissue surrounding the eyelids is totally unfitted for plastic purposes, and with correction of ectropion, there seemed to be no alternative, but to resort to some of the methods of skin-grafting, yet, by faithful and long-continued massage, the structure of the cicatrices is so profoundly and favourably altered, that their use in the formation of flaps to restore the lids becomes really the method of choice. The present case furnishes an illustration of the correctness of Hotz' views. The skin has under the massaging become nearly normal in colour, soft and pliable, moves much more readily over the deeper structures, and the ectropion of the right eye is entirely removed.

It was Bull who first recommended in 1881 persistent massage to bring about and increase these favourable changes in scar-tissue. "By this means," he says, "adhesions of scars slight or extensive to the adjacent parts have been slowly, cautiously and painlessly detached, and a gradual absorption of the firm material in the dense parts of the scar have been brought about."

After five months' massage Hotz' operation for the relief of the upper lid ectropion—as detailed in his article previously referred to—was performed, and the result promises to be on the whole satisfactory.

III. Glasses with Snellen's Stenopaic Slits for Keratoconus.—O. S., aged 20, always been defective-sighted.

V = R $\frac{1}{16}$, and J. 6 at 10 c.m.

L $\frac{1}{16}$, and J. 8 at 10 c.m.

Under atropine:

V = R = ∞ — 1.25 D \odot + 2.00 D ax. $70^\circ = \frac{1}{16}$

L = ∞ 2.00 D ax. $70^\circ = \frac{1}{16}$

Without the mydriatic:

V = ∞ + 2.00 D ax. $70^\circ = \frac{1}{16}$ (both)

and J. 2 at 20 c.m. (difficult)

With this correction and Snellen's slits super-added

V = R = $\frac{1}{16}$ } combined
L = $\frac{1}{16}$

J. 1 at 22 c.m. { singly—difficult
combined—easily read.

Prof. Snellen has recommended the kind of stenopaic glass now exhibited for his Keratoconus patients.†

*Arch. Ophthal. Vol. XXV. p. 2-3.

†Am. Jour. Med. Science. Vol. 82. p. 431.

‡Graefe's Arch. XLIV. L. p. 108.

The slit is wedge-shaped, broad at the periphery and ends in a sharp point at the centre. He has adopted this shape because it is found that vision is of a wider range when the horizontal slit is broad and of greater acuteness when the slit is narrow. This then is a happy combination of both. The above record of this patient will show, that his vision is improved for both distance and near by the application of the slit, and it was found that the same acuity could not be obtained by any of the other ordinary-shaped slits. The effect of cylinder-correction of Keratoconus depends, as Lohstein points out,* very much on the size of the pupil, and it is in influencing this latter that the stenopaic slits become helpful to the vision. As an illustration of the same influence on vision in these cases may be mentioned the efficacy of tattooing the apex of the cone, which not only often helps to prevent increase of the conicity, but it also, by preventing too much pupil contraction, distinctly improves the visual power.

IV. Congenital Bilateral Abducens Paralysis.—A. J., aged 13, has always had a peculiar appearance of eyes, especially when he looks in certain directions. On examination it was found that there is complete inability to turn either eye outwards beyond the middle line, and as a result a want of conjugate movements. When he wishes to see anything very carefully he holds his head either very high up and looks down at the object, or sometimes reverses the process, and holds the head with his chin on his breast and looks upwards. The interni act normally, also the inferior obliques, but the movement of the eyeballs upwards and outwards by the superior oblique is nearly wanting. There is an attempt made to move the eye in these last directions. When this is made, and the globe is suddenly brought up to the middle line, a movement resembling a horizontal oscillating nystagmus is apparent. The visual acuity is normal, but it is difficult to determine whether he uses both eyes together or not. He has binocular vision as shown by the use of Priestly Smith's test, but his answers when Hering's drop experiment is tried suggest the idea that he must at times suppress the image of one eye. The application of the faradic and constant currents to the region of the muscles affected does not seem to cause any contraction. The case is interesting as furnishing an illustration of congenital paralysis due probably to intra-uterine peripheral or nuclear causes.

V. Addison's Disease in a lad aged 13.

DR. CAVENAGH-MAINWARING showed, for Dr. C. E. TODD, a well-marked case of melanotic sarcoma of the neck. The patient was a stout, well-nourished woman of 48, the mother of thirteen children. From the left side of her occipital protuberances in a sloping direction, over the left shoulder and down to the left mamma were scattered sarcomatous growths, deeply pigmented and varying in size from a small walnut to a pin's head. There were perhaps thirty growths in all. Many of the larger ones were already beginning to ulcerate. The glands in various parts of the body were enlarged; under the left axilla and on the left side of the neck there was a dense mass of indurated glands. In the right groin was a melanotic growth similar to those upon the neck. The glands in the right side of the neck and in both groins were much enlarged. It was difficult to get a history of the beginning of the growths but they probably originated in a pigmented mole which occupied the site of the growth nearest the left mamma. This was at once

the largest, the most pigmented, and the most ulcerated of all the growths; from it was removed the small portion which Dr. Cavanagh Mainwaring kindly examined by the microscope. Various modes of treatment were discussed, but in view of the rapidity of the growth (seven months ago the patient was quite well) and its disseminated character, it was generally admitted that no surgical operation would be any use.

Dr. FISCHER showed a young man, age 24, who is able voluntarily, and without any assistance save that of his facial muscles, to evert the upper eyelids either separately or together, and so expose to view the upper tarsal cartilages in all their length and breadth; and who also, either separately or whilst everting the upper lids can so invert the lower lids as almost to conceal in the inferior sulcus of each eye his long lower eyelashes. (As no mention of a similar case is to be found in the literature at his disposal, Dr. Fischer deems the case worthy to be shown and placed on record.) The same individual can also double back the anterior third of his tongue so as to make it lie flat upon the posterior portion.

PATHOLOGICAL SPECIMENS.

On account of the lateness of the hour, Prof. WATSON limited his remarks to two specimens, which he wanted to show while still in the recent state.

1. Succulent multinodular uterine myoma, $\frac{1}{2}$ lbs. weight, from a two para *et.* 38, last child 16 years old.

She arrived from West Australia with frightful metrorrhagia, and in a state of profound anæmia, with a faint lemon-coloured blush of her otherwise blonde skin. Autotransfusion by bandaging the lower extremities was resorted to, and the abdomen opened "*d'un seul coup*" and the blood supply of the tumour commanded with four clips before any attempt at delivery was made. The tumour (uterus) supported the bowels and kept them warmer than any sponge. Rapid delivery and section of cervix, and substitution of clip by fine tendon, after which, in the absence of all danger signals from the anaesthetist, the abdominal wound was closed in five layers leisurely. There was some pale, amber-coloured fluid in the peritoneal cavity, which Dr. Way tells me is a sign of peritoneal tolerance, but I have heard another Australian gynecologist call it a very bad sign. Ether throughout. No shock. Patient's bowels began to move the following day, after which she was allowed liquid food.—Dr. Way.

2. Partly telangiectatic myoma of uterus, illustrative of abdominal method of morcellation. The largest piece (corpus uteri) weighs 13 lbs. The six smaller pieces (cervix uteri) range up to $1\frac{1}{2}$ lbs. There must have been a couple of pounds' weight of blood and lymph in the spaces of the tumour. Patient was an old lady who years before the menopause had noticed a tumour (represented in the specimen by a semicalcified mass no bigger than a hen's egg).

Post climacteric increase, or rather recrudescence of the neo-plasm, caused blockage of the pelvis, the bladder being flattened out like the spleen of an ox, and the ovaries compressed into leather-like discs. Some pale fluid (as in the previous case) lubricated the peritoneal cavity, and fortunately there were no adhesions. Clips were jammed on the four cardinal points, and the adnexial connections of the fundus cut adrift, and the abdominal portion of the tumour delivered in its smallest diameter with a shark hook, and cut off. A sponge was now placed on the intestines; and the cervical developments delivered, just missing the vagina. Symperitoneal suture, with green tendon,

closed the cervical stump as well. The uterine arteries, which were barely recognisable by touch amongst the huge veins on the floor of the pelvis, began to throb like carotids after ligation, and no doubt within 24 hours had clotted up almost to their origin from the internal iliac.—Dr. Lendon.

Minutes of last meeting were taken as read.

Henry A. B. Davies, M.R.C.S., L.D.C.P. Edin., and A. R. Macmillan, M.B., C.M., Edin., were elected members of the Branch.

The PRESIDENT submitted the resolutions *re* the Health Act drawn up by the Council, which were carried.

"1. That the Central Board of Health be requested to obtain the opinion of the Law Officers of the Crown as to whether Section 129 of the Health Act—when read in conjunction with the Section immediately preceding and with the first three lines of Section 5—does not include payment for reports of pulmonary tuberculosis; also, in the event of Local Boards of Health being willing to make such payments if the expenditure would be legal.

"2. *Re* Clause 138, Section (b):—That inasmuch as measles and whooping cough are not included under infectious diseases, therefore not subject to notification and other provisions of the Act, it will be incumbent on the Education Department, presumably after consultation with the Health authorities, to fix some definite period that must elapse before children who have suffered from these diseases shall be allowed to attend school; this Branch suggests that the Central Board of Health also fixes stated periods in the case of infectious diseases, particularly diphtheria and scarlet fever, before which children will not be allowed to return to school.

"3. That the Central Board of Health be requested to issue regulations to facilitate the working of Section 128. This Branch is of opinion that without these, friction is sure to arise, and it suggests that the regulation should limit the action to be taken by the local Boards of Health to (1) during the life of the patient, removing insanitary conditions, leaving printed instructions showing how to prevent the spread of infection, and (2) after the patient's death or vacation of the house, carrying out disinfection of the premises. If these cannot be issued as regulations, it is suggested that the Central Board of Health issue them as instructions to the Medical Officers of Health.

"4. That the Central Board of Health be requested to provide maps of the metropolitan area and other centres of population in the colony, showing the boundaries of the various Municipalities and District Councils, in order to facilitate the working of Section 127."

Dr. SHUTER read a paper on "Two Cases of Removal of Vermiform Appendix." Discussed by Professor Watson, Drs. J. A. G. Hamilton, Jay, and Poulton. (See page 192).

Dr. SHUTER also read papers on three Hydatid cases, and mentioned a case of Hernia Cerebri. (To appear in a future issue).

Prof. WATSON remarked that not enough attention was paid to the relations of the omentum to the inflamed appendix. Often enough the omentum led right down to the appendix, to which it was adherent.

The last six inches of the ileum was also a piece of bowel which every surgeon should study, as in 60 per cent. of cases the appendix lay under its ledge. When abscess was present in these cases, the lower blade of the iliac mesentery served as a roof to the pus cavity. Operators scratched too much. It was much better to humble oneself at the dead-house for a few weeks, and learn to use the sharpest knife and abandon scratching.

Time did not permit of discussion of the layering method of closing abdominal wounds. *En masse* suture was better than the layer methods usually performed, where the dynamic muscle was sewn in the same layer as the static aponeurosis. This was the fault of the text-books.

Dr. J. A. G. HAMILTON congratulated Dr. Shuter on the success of his two cases of appendicitis, and thanked him on behalf of the Council for the trouble he has taken in coming such a long distance to bring his very interesting cases before the Society. The question of when to operate on cases of appendicitis was much too large a subject to enter into this evening as there were so many interesting papers to be read. As regards the position of the incisions, some operators favoured a vertical incision through the sheath of the rectus; this always appeared to him wrong, as it divided important nerves. It was frequently not in a good position to get at the appendix, and it was much more likely to be followed by a hernia than the following incision:—A line drawn from the umbilicus to ant. sup. spine, an oblique incision crosses the middle of this line, in some cases keeping down closer to the ant. sup. spine. The skin and fat being cut obliquely, the fibres of ext. oblique appear, these can be split in line of incision. The fibres of the int. oblique can then be split by separating them in a line at right angles to skin incision. By this means you get a lozenge-shaped opening, giving you, with retraction, a good view and plenty of room, this without cutting across a single muscular fibre. When closing this wound, these muscle fibres can be approximated with a few wallaby tendons, and you get a firm abdominal wall with little danger of hernia. Regarding Dr. Shuter's question *re* suturing the abdominal wall, he had entirely given up through and through sutures, as he had frequently seen hernia follow this method of closing the abdomen. Within the last two or three years he had seen a very large number of abdominal incisions closed by layer sutures without a single hernia resulting. He used soft fine wallaby tendon for the peritoneum and posterior fascia. Strong chromicised tendon for the aponeurosis and silk-worm gut or horse hair for the skin. It appeared to him to stand to reason that you get firm and true union when each separate structure is brought into its normal position, while with through and through sutures you cannot depend upon each layer being truly approximated. Although nearly all cases of appendicitis are operated on through an incision in the anterior abdominal wall, there are, in his opinion, many cases which could be much more safely and easily operated on by a lumbar incision, extending along the twelfth rib, from the outer edge of the erector spine towards the crest of the ilium. We have all come across cases where we are able to diagnose appendicitis without any marked swelling towards the anterior abdominal wall. If in these cases the abdomen is opened in front, and pus is struck the general peritoneal cavity is very likely to be infected as the appendix is adherent to the posterior peritoneum. If these cases are attacked from a lumbar incision the pus can be given vent to without opening the peritoneal cavity, and in all that sort of cases it is much better once pus is struck to be satisfied with drainage or washing out without rooting round to find the appendix, to do so means breaking down adhesions or exposing the peritoneal cavity to the danger of infection. I had a case of this sort a few months ago. A man was brought to me from the country with well-marked symptoms of acute appendicitis. He had been laid up off and on for over a month. The usual

anterior incision was made; an enormously enlarged and thickened appendix was found; it was with difficulty dug out of its bed adherent to the posterior peritoneum. No pus was seen. The wound was closed in the usual way, without drainage. A few days afterwards, stinking pus commenced to well up between the stitches. Several ineffectual attempts were made to find and drain the abscess cavity. There was a copious discharge of offensive pus. The patient looked as if he were doomed; finally a lumbar incision was made, a big abscess cavity was struck and drained. After this the patient rapidly recovered, and is now quite well. A few years ago I saw a *post-mortem* examination on the body of a well-known divine in this city. An abscess of the appendix was found to have ruptured on the iliacus muscle, and burrowed down the thigh and round his hip joint. Possibly, had the condition been recognised earlier and a lumbar incision made, this valuable life might have been saved. I can find no reference to this incision in the many articles and treatises on appendicitis. Edebohl, in a paper read before the New York Medical Society, "On the Relation of Moveable Kidney and Appendicitis to each other," says: "Both operations, right nephropexy and appendicitis, may be simultaneously performed through one and the same lumbar incision."

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting of the Branch was held in the Rooms, 178 Collins Street, on Wednesday, April 25th, at 8 p.m. Present: The President (Dr. Kenny, in the chair), and Drs. Laurence, Sexton, Alexander, Kent-Hughes, Springthorpe, Argyle, Hamilton, McGee, Griffith, Black, Loughnan, Willis, Stawell, Henry, Greig, Bird, J. R. M. Thomson, Officer, Hutton, Stevens, Cuscaden, Newman, Alan Mackay, Scott, and Andrews.

The minutes of the previous meeting, as in the *Gazette*, were adopted.

THE HON. SECRETARY read a telegram from a practitioner in West Australia as to his treatment by a local committee. Steps were taken in accord with his suggestions.

CASES.

- (1) MR. KENT-HUGHES showed a case of spina bifida in a child, aged 18 months, treated by two injections of Morton's fluid, and now walking well.
- (2) MR. F. BIRD showed a photograph (the boy having run away) of a case of multiple osteomata, some twenty in number, some fascial, some muscular, and not all near the epiphyses. He also showed a case from which he had removed an inch of the ileum, and several inches of the ascending colon, as well as a malignant growth, with eight or ten nodules in the meso-colon, only three weeks previously. He had used a Murphy's button of the largest size, which passed on the eleventh day, and, an important matter in his opinion, he had used the median incision. The specimen was also exhibited.
- (3) DR. LAURENCE showed a case of traumatic epilepsy trephined on the left arm centre with fairly satisfactory results, and recently exhibiting illustration of post epileptic automatism.

DR. SPRINGTHORPE referred to the absence of any mental inertness or deficiency in traumatic cases generally, and the importance from the legal point of

view of recognising the sub-conscious position of many acts, thoughts, etc., in the post epileptic status.

DR. SPRINGTHORPE then resumed the discussion on summer diarrhoea. Naturally, he approached the question more from the adult side. He said the starting point came under the heading of simple diarrhoea, variously called acute dyspeptic diarrhoea, simple acute intestinal or gastro-intestinal catarrh, or acute intestinal dyspepsia, the lesion being limited to hyperæmia, increase in mucus, and fermentative products. The local nerves or mucous membranes were below par, and excessive, improper, or fermenting food was the exciting cause. In severe cases this passed into distinct inflammation, more of the lower ileum and colon, and according to site and cause received the new names of acute gastro-enteric infection, ptomaine poisoning, English cholera, cholera infantum, acute entero-colitis, ileo-colitis, follicular enteritis, and gastro-enteritis. The more common exciting causes in adults were polluted water supply (more in country cases), corned and tinned meats, various fish, sausages, turkey giblets, etc. Undoubtedly the germ factor with different toxins played the prominent part. These were not necessarily introduced from without—the intestinal flora, especially varieties of colon bacillus, might become pathogenic and do the mischief. Nor would the Widal test separate these from cases of mild typhoid, as was hoped, unless we could be absolutely certain that we were dealing with the bacillus of Ebert in our test, and not, as often, with some modification of the colon bacillus, or other intestinal germ. A fresh factor, however, was required to account for the summer diarrhoea of infants. Observation showed that this terribly fatal disease became epidemic in December, and continued its ravages during January and February. Temperature explained much, but not all of this. Temperature and stale milk explained it almost all. Apparently the high temperature promoted changes in kept milk, rendering it practically a poison in less than eighteen hours. The summer diarrhoea of children should thus be regarded as cases of acute intestinal poisoning, from bacteria and bacterial products evolved in stale milk in hot weather. As regards treatment, it should be remembered that slight diarrhoeas predisposed, that general weakness made the child more susceptible to attack, and that prevention could always be secured by scrupulous care in hygiene and diet, and timely removal to a cooler climate. Actual cases should be treated promptly and energetically, as if cases of acute poisoning. Where change was impossible, pure cool air and rest should be sought for, the stomach cleared by lavage or emetic, the small bowel cleared by castor oil, fractional doses of calomel and sodii bicarb., and the large bowel washed out either with simple boiled water or medicated with boric acid, hamamelis, etc. As regards diet, food should be withheld until the gastro-intestine was clear, giving only boiled water, ice, or egg water. Brandy was required early, in small repeated doses; afterwards beef juice, broth, scraped meat, and no milk until the acute symptoms had subsided. Hydrotherapy was of undoubted value; as regards drugs, strychnine and alcohol were the sheet anchors, then minute doses of morphia, with or without atropine, and bismuth and salol, according to indications. In adults with acute entero-colitis there was more to be expected from internal astringents and antiseptics than in children. Three points were worthy of especial mention: (1) The dissemination of knowledge as to diet amongst those responsible for the feeding of infants; (2) the prompt supply of pure milk; (3) a better recognition by the profession generally of the whole situation.

Dr. WILLIS considered that the direct cause was in the food, the heat was only adjuvant. The intestine of a newborn child was sterile, but soon became full of different bacteria of which the colon bacillus was the commonest, and injurious through its toxine. Pfeiffer said that green stools were due to alkaline fermentation, and there the colon bacillus might be operative. In other cases, such as cholera infantum, some muscarin body might be the active agent, and he would separate such from the former. He was inclined to think that "marasmus" might be the result of the solitary glands, which were so active in nutrition, being damaged by these diarrhoeal diseases. As regards treatment, he found drugs of great benefit. The indications were to remove or attenuate the germs and toxines to relieve pain, render ingesta innocuous, and stimulate and support the patient until all was eliminated. In ordinary practice irrigation twice a day was impracticable, and specially so in lodge practice. Calomel, castor oil, starving, suitable change of food were the main expedients, and he would put in a plea for astringents.

Dr. STANLEY ARGYLE said that an examination of the statistics showed that one or two points in the aetiology might be regarded as definitely settled. (1) That practically the whole of the mortality occurs in the three summer months. (2) That the mortality is almost entirely confined to the large centres of population, the deaths per 1,000 births in the country being infinitesimal. (3) The disease does not occur in infants which are wholly suckled. The statistics recently collected in Melbourne bore out Snow's contention that a wet season diminished the mortality to a large extent. Stale milk polluted with the dust of a great city might be regarded as a large factor in the causation of the disease.

Dr. ALAN MACKAY said that he found no method of treatment so effective as intestinal irrigation, which was not difficult to do if the proper apparatus and correct method were adopted. The apparatus required was a soft rubber oesophageal tube about the thickness of the end of the little finger, with about three feet of rubber tubing and a glass funnel attached. The mother or nurse must sit down, cover her knees with a mackintosh or folded blanket, lay the infant on its back across her lap, and hold up both its feet with one hand, keeping her other hand free to pour the warm water or solution from a jug into the funnel when directed. At her feet is placed a bucket or basin to receive the return flow. A little of the warm solution is run through the funnel and tube, then the tip of the tube is oiled and slowly pushed through the sphincter ani, the funnel is then filled and raised until the solution begins to run slowly into the rectum; if it runs too fast the funnel is lowered. As it runs in it distends the part of the bowel in which the tube is lying, so as to obliterate the folds of the mucous membrane and to slightly straighten the canal; then the tube is gently pushed on, while the nurse keeps filling the funnel. In this way there is very little difficulty in getting past the sigmoid flexure and introducing eighteen inches or more of tubing. Then one or two pints may be thrown up into the bowel, and by alternately raising and lowering the funnel the whole of the large intestine can be washed out. Thorough irrigation once or twice at the outset of an attack will often effect a cure. In other cases it may be advisable to wash out two or three times daily for several days; and even if the doctor cannot spare time to do it so often he should do it as frequently as he can. A thorough irrigation every second or third day is a most valuable aid to medicinal treatment. For medicines

he relied chiefly on the ordinary bismuth and chalk mixture, small repeated doses of calomel, or castor oil and opium. Of laudanum and Dover's powder in cases where there was much tenesmus he had the highest opinion, but opium in any form required very careful watching. Dieting was of paramount importance. He ordered milk to be stopped altogether for some days, and ordered egg albumen water, barley water, rice water, and meat juice, varying the directions as occasion arose. It was essential to give very minute written directions in most cases, and it was always advisable to inquire into and observe the preparation of food, and the general management of the nursery, and to instruct the child's attendant to at once disinfect and remove from the room all soiled linen.

Dr. GRIFFITH referred to the enormous advantage of a good wet nurse. An unusual proportion of deaths occurred amongst illegitimates, due to the special circumstances of such cases, and not necessarily from special inattention or neglect.

Dr. ANDREWS supported the plea for drugs. Irrigation left the small intestine very little influenced. He had had very good results from small doses of Dover's powder.

Dr. STAWELL replied. The prominent recognition that stale milk was the chief aetiological factor was a great advance, and not twelve months old in Victoria. Many medical men, however, still failed to recognise how to give milk at different ages so as to be really digestible. Obstetricians were mainly at fault, even the Women's Hospital authorities were satisfied apparently, that 1 of milk to 2 of water was always sufficient dilution, though it might be three times too strong at first. Another advance was the recognition that different varieties of germs were concerned, though little practical good had so far accrued. As regards treatment, there had been no improvement in the last two years. Castor oil and quinine was still the best routine. He had been singularly unsuccessful with evacuates. Many still regarded washing out the bowel as a new line of treatment, though it was far from new. No doubt it was difficult if the principles laid down by Dr. Mackay were not recognised. It would be ineffective if the tube did not reach the splenic flexure. By the induced paristalsis down came the contents of the small intestine. Its value was beyond question, especially at the start. Then will end exacerbation. Even at the Children's Outpatient Department it could be done twice a week. He had found none better than the saline solution. He had not found antiseptics of any real value. Some caused mere cessation of action, others were really irritants. He would protest against the phenol compounds until it could be shown that they lessened the number of bacilli or improved the general condition. He had given up astringents because he was not satisfied they acted as such in the bowel, and they upset the digestion. He had found no good from the mineral acids. No one had given drug treatment a fuller trial, and no one was more dissatisfied. He still had hopes from Tannogen. Opium was of undoubted value, but it was unwise in high pyrexia, no matter how frequent the motions. In conclusion, there would be no progress so long as it was considered impossible to imitate human breast milk. If sterile and properly made, just as good results, even better, were possible; but the practical difficulties of supply and keeping were very great.

After Dr. Stawell had replied, Dr. MACKAY rose and asked the chairman's permission to correct a statement of Dr. Stawell's that women on leaving the Women's Hospital were instructed to feed their infants on a mixture of milk and water in the proportion of one to

two. All patients leaving the Women's Hospital, if unable to suckle their infants, were supplied with the printed instructions issued under the Infant Life Protection Act for the guidance of registered nurses. Those leaflets, as Dr. Stawell would remember, were printed with the approval of the Children's Hospital staff.

Dr. OFFICER also replied, and dwelt upon the general agreement that had been expressed as to treatment and pathology.

The meeting then adjourned.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

CANTERBURY SECTION.

An ordinary meeting of the Section was held on 8th December, 1898. Present: Dr. C. M. Anderson (Vice-President) in the chair, and a good attendance of members.

An intimation was received that the Council of the British Medical Association, New Zealand Branch, would meet at Auckland on 4th January.

In the unavoidable absence of Dr. Fairman, the "Presidential Retiring Address" was read by Dr. CAMPBELL, and a hearty vote of thanks was passed to the President for his interesting paper.

A motion was then considered,—"That a Committee be appointed to consider the subject of the establishment of a department for Pathology in connection with the Hospital, and to report on the best means of attaining such an end." A good deal of interest was exhibited in this matter. Dr. CAMPBELL pointed out that in Wellington Dr. FFFFE had been appointed Pathologist, and a sum of £180 allocated towards furnishing and establishing a suitable laboratory. Dr. SYMES considered it important that such a laboratory should be under the charge of a competent man, otherwise the valuable apparatus would be neglected. Dr. FOX (Surgeon-Superintendent of the Hospital) thought the first step was to approach the Hospital Board. He had himself moved in the direction a few months ago, but, so far, there had been no result, due, he thought, to a fear of the expense. It was finally agreed that the Committee of the Section should first take steps to obtain the signatures of the Hospital staff and other members of the profession as to the urgent necessity for such a department, and then approach the Hospital Board.

Dr. CAMPBELL moved,—"That after the beginning of 1899, papers read before the Section shall only be sent for publication with the consent of the writer." He suggested that any paper which the author did not wish published might be marked "Not for publication." Dr. C. M. ANDERSON seconded, and believed that many more papers would be read were it not for this fear of publication. Dr. SYMES considered it a mistake to publish papers unless they reached a certain standard. Medical literature was now-a-days so extensive that it was impossible to wade through the mass, and it was inadvisable to waste time over mediocre work. The motion was strongly opposed by the LOCAL EDITOR, on the grounds that it was supererogative and calculated to interfere with the material for our medical journal. He would not think of forwarding a paper to the Editor if the author expressed a strong wish that it should not be published. He could only recall one instance where this wish had been expressed. The difficulty the Editor had to deal with was not so much in discriminating between good and bad papers as in

obtaining papers of any kind. He considered it was rather an incentive to the production of medical articles when members could rely upon their publication, if considered of *sufficient interest* by the Editor. The motion was eventually withdrawn.

It was agreed that our representative at the Auckland meeting—Dr. Campbell—should invite the Council to hold its annual meeting for 1900 in Christchurch.

In view of the probable acceptance of this invitation, a special meeting was held on 20th December to consider nominations for the position of President-elect, and on the motion of Drs. CAMPBELL and PAIRMAN, Dr. W. Thomas was unanimously appointed. Dr. Thomas thanked members for the honour conferred upon him, and trusted they would give him every assistance in his endeavour to make the year 1900 a successful one, and alike creditable to the profession in Canterbury and to the British Medical Association.

An ordinary meeting was held on 9th February, Dr. Campbell (Vice-President) in the chair, and a large attendance of members.

Dr. CAMPBELL reported that, at the Auckland meeting, a deputation had waited on the Minister of Lands re the proposed Bacteriological Laboratory, with the result that probably a central station would be established for the supply of culture media and antitoxins. Pathological specimens would be examined and reported upon by Mr. Gilruth. The Government also agreed to accept the suggestion that medical practitioners should insert the words "As I am informed" in death certificates.

Dr. FENWICK read a most instructive and interesting paper on the course and explanation of genito-urinary pain (see p. 182), the value of which was much enhanced by a model, exhibiting the lower abdominal organs with their sympathetic and spinal nerve connections. Those who took part in the after discussion joined in complimenting Dr. Fenwick upon the excellence of his paper, and upon the trouble and care he had taken in ensuring the accuracy of his model. Dr. SYMES supplied the following as "supplementary notes" to Dr. Fenwick's paper:—"There were indications that in the near future psychology would provide us with a system of mental therapeutics to compensate us in some degree for the growing scepticism as to drugs. Pain had been defined as the cry of the nerves for a better blood supply. This is illustrated by the striking phenomenon of the turgescence of the veins, which is observed in the neighbourhood of the affected joint in an acute attack of gout. This was not due to pressure upon the veins, but rather to the spasmodic contraction of the arterioles produced by the irritation of uric acid in the blood. The sudden onset of excruciating pain is due to the arrest of circulation cutting off the supply of nutritious pabulum from the adjoining sensitive nerves. The deposition of uric acid in the tissues has been regarded by some as the peculiar character of gouty inflammation, but there is no evidence of any inflammation. It is deposited from the blood plasma, which is exuded from the turgid veins, and subsequently reabsorbed. The temperature of the distal extremity of the affected toe is always subnormal (95½°—97°)—a temperature quite inconsistent with inflammation, and only explicable by arrest of circulation in the joint implicated. The good effect of massage and exercise in gout confirms this view of its pathology. Pain as a mental phenomenon is closely related to the other emotions, as anger, courage, pleasure, etc. All emotions are produced by alterations in the distribution of blood in the body, and the sympathetic system regulates the

distribution. Let us suppose a mouse feeding quietly; its abdominal blood vessels will be dilated, and a large proportion of its blood is collected in the digestive organs. If a cat appears on the scene, the vaso-motor nerves instantly contract the abdominal arteries and send the blood to the muscles for the purpose of flight. Similarly the blood is driven to the head by anger, to the heart by courage, to the abdomen by pleasure, etc."

An ordinary meeting was held on 9th March, Dr. Campbell (Vice-President) in the chair.

Attention was drawn to the frequent appearance of advertisements in connection with a certain member of the Branch, and the Hon. Sec. was directed to write in a friendly way to the gentleman in question, pointing out that the Section views with disfavour such action, and trusts that he will discontinue the same.

Dr. CAMPBELL reported that a circular had been forwarded to all members, setting forth that the Council of the Branch intends to bring under the notice of the General Medical Council the case of any registered practitioner who identifies himself with the Hagey and allied institutions which are being established in New Zealand for the cure of inebriety.

Dr. E. P. S. Gane was duly elected Hon. Sec. of the Section.

Dr. FENWICK gave short notes of several cases of interest which had occurred in his practice. These included rupture of cancerous stomach (see page 197) during operation, pulsating tumour in the submaxillary region, and cerebral abscess. He also exhibited a supernumerary mammary gland, removed by Dr. Moorhouse from the axilla of a woman who was suckling, and had become worried at its presence. There was no nipple, but milk oozed out freely when it was cut into during operation. A similar gland existed in the other axilla.

BALLARAT DISTRICT BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE Ordinary Quarterly Meeting was held on April 27th. Present: The President (Dr. B. Scott), Drs. Champion, Cussen, Gardiner, Hardy, B. W. Lethbridge, Martin, Pincock, Richards, G. A. Scott, Usher and Mitchell (hon. sec.)

Apologies were received from Drs. Courtenay, Donaldson, Jordan, Palmer, Salmon, and Wilson.

The minutes of the previous meeting were read and confirmed.

The Superintendent of Police wrote, stating that a roster of medical practitioners had been prepared for the use of the Coroner, which would be rigidly adhered to.

The PRESIDENT reported that he had interviewed the editors of the local daily papers, and that they had agreed to suppress the names of doctors in "letters of thanks" published by them.

Accounts amounting to £31 10s. were passed for payment.

Mr. HILSON, Honorary Masseur to the Ballarat Hospital, attended and exhibited the following cases:—

1. Young man with dislocation of head of radius and much loss of movement at elbow joint
2. Young woman with fixation of hip and knee joints.

A resolution was passed thanking Mr. Hilson for his attendance, and congratulating him on the excellent results achieved.

Dr. PINCOCK read "Notes on some Cases of Rarity met with in General Practice." (To be reported later.)

Dr. CUSSEN read a paper on "Infantile Gastro-Enteritis" (reported at page 188), which evoked con-

siderable discussion, in which most of the members present took part. The opinion was expressed that the Society should at an early date discuss the questions of boarding out of infants and the milk supply, with a view of arousing public interest in these matters.

Dr. MITCHELL read a paper on "An Unusual Case of Ulcer of the Stomach" (reported at page 195).

Dr. GARDINER exhibited the following specimens:—

1. Small intestine, showing firm bands of adhesions constricting the bowel after forty hours illness in a lad aged 17.
2. Great intestine one mass of ulceration, with small hæmorrhagic patches in acute entero-colitis nine days' standing, in a girl aged 3.
3. Kidneys from woman aged 39. Both together weighed 2½ ounces. Cortices very adherent and granular. Patient died uræmic.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

LAUNCESTON SUB-BRANCH.

A MEETING of the Launceston Sub-branch of the Victorian Branch of the British Medical Association was held on April 24th. Dr. Maddox presided.

Dr. PIKE stated that at the late conference of the Hospital Committee and the consulting staff he had expressed no opinion about the scheme of hospital reform advocated by the Association.

It was resolved to send a summary of Dr. Pardey's actions re hospital reform to the medical press.

On February 27th, 1899, at a meeting of the Launceston Sub-branch of the British Medical Association attention was called to the peculiar action of one of its members (Dr. Pardey) in connection with the endeavour of the Association to introduce much needed reform in the professional arrangements of the Launceston General Hospital. Strong comment was made on the action of the gentleman named, and it was decided at a subsequent meeting in April to forward an account of his actions to the medical press. The summary is as follows:—

At a meeting of the local branch of the British Medical Association in September, 1897, Dr. Pardey seconded a motion to the effect that the managing board of the General Hospital be petitioned to make alterations in the constitution of the medical staff, etc.

In October, 1897, it was moved by Dr. Pardey that the petition as drawn up be adopted by the Association. This petition was signed, amongst others, by Dr. Pardey, and was rejected by the Hospital Board.

In February, 1898, a motion asking for a conference of the Association with the Board on the same subject was carried. The Board refused absolutely to make any change.

In August, 1898, a motion was seconded by Dr. Pardey to the effect that copies of the following resolution: "That this Society, while thanking the Board of Management of the Launceston General Hospital for their consideration of the petition, regrets their action in refusing to accept the reform suggested by this Society, a reform which is necessary to enable the Hospital to do its work efficiently, and to keep it up to modern requirements," be sent to the Ministry, members of Parliament, and the press, and that a deputation wait upon the Premier to urge the necessity for reform.

Subsequently a deputation of five, including Dr. Pardey, waited upon the Premier, and urged upon him the necessity for reforms at the Hospital. The chief reforms asked for were: (1) Appointment of an active

staff of physicians and surgeons in place of a consulting staff, whose duties Dr. Pardey has stated to be purely nominal. (2) The right of entree of the medical profession to the Hospital at stated hours. (3) The institution of some special departments, including that of a pathologist and bacteriologist. (4) The substitution of an elective board for a self-nominated one. The deputation was very favourably received by the Premier.

At the end of the year 1898, Dr. Pardey accepted the position of consulting surgeon to the Hospital, and shortly afterwards, without giving any notice to the Association, at a conference between the Hospital Board and its honorary consulting staff, this gentleman stated that, if a staff of surgeons and physicians with beds allotted to them were appointed, he would be unable to accept such position, and further, *that it would not be an advantage to alter the present system at the Hospital.*

PROCEEDINGS OF OTHER SOCIETIES.

MEDICAL SOCIETY OF QUEENSLAND.

THE 148th General Meeting was held on May 2nd in the Society's rooms. Present: Dr. Hardie (President), Drs. Bancroft, Love, Gibson, Scott, Wheeler, Robertson, Francis, Orr, Carvoso, Hopkins, Dixon, and Turner.

H. M. Lightoller, M.R.C.S. Eng., L.R.C.P. Lond., was unanimously elected to membership.

PREVENTION OF TUBERCULOSIS.

Dr. TURNER moved the resolution of which he had given notice at last meeting, but after some discussion withdrew it in favour of the following motion, proposed by Dr. FRANCIS, seconded by Dr. LOVE:—

"That it is desirable that a public meeting be held with regard to the prevention of tuberculosis, and that the Governor be approached in connection with the same." Carried unanimously.

Dr. TURNER then moved—"That a sub-committee, consisting of President, Treasurer, and Secretary, with power to add to their number, be appointed to give effect to this resolution." This was seconded by Dr. GIBSON, and carried.

Dr. WHEELER moved—"That the Queensland Branch of the British Medical Association be invited to co-operate with this Society in approaching the Governor with reference to the holding of a public meeting to discuss the prevention of tuberculosis." This was seconded by Dr. LOVE, and carried unanimously.

The Secretary was instructed to write in accordance with this resolution.

UNION OF MEDICAL SOCIETIES.

The PRESIDENT read the following letter, dated April 10th:—

"Sir,—

"At a meeting of the Queensland Branch of the British Medical Association the following motion was carried, and I was instructed to write and inform you of it: 'That, in the opinion of this meeting, the interests of the profession would be advanced by union of the two medical societies now existing in Brisbane.'"

"The date of the meeting was April 7th, 1899.

"Yours truly,

"T. GLYNN CONNOLLY.

"To Dr. Turner,

"Hon. Sec. Queensland Medical Society."

This was, he considered, a most important resolution. He thought that he was expressing the sentiments of all present by saying that they accorded it a hearty welcome, and hoped that union might follow. He did not think there was much difficulty in the way provided that they were seriously in earnest on both sides, and prepared to deal fairly and honestly not only with their own society, but with the society with which they desired to unite. He would conclude by moving a resolution, which was expressed in identical terms to that which had been received, namely,—*"That in the opinion of this meeting the interests of the profession would be advanced by union of the two medical societies now existing in Brisbane."*

This was seconded by Dr. BANCROFT, and carried unanimously.

Dr. LOVE moved,—*"That the Council of this Society be instructed to invite the Council of the Queensland Branch of the British Medical Association to meet them on the 12th instant, or at an early date, to discuss a method of union of the two societies."*

This was seconded by Dr. WHEELER, and carried unanimously.

The PRESIDENT was glad to find that the proposed resolutions had been carried without any opposition. The subject of union had already been discussed by the Council. As far as he could see, there were only three possible methods. (1) By the Branch inviting the members of the Society to become members of the Branch, and in proceeding to their election in the ordinary way. (2) By the parent Association, at the request of both Societies, reconstituting the local Branch so as to include the members of the Queensland Medical Society. (3) By the dissolution of both Societies and the formation of a new Society, which should seek recognition as a Branch of the British Medical Association. The first method was objected to by the Council, as this would be not union by amalgamation, but simply absorption. If union was to be on equal terms the third method was the one to be chosen. If, however, this was objected to by the other society, they might fall back on the second plan, though he regarded that as a very considerable concession. A fresh election of officers would naturally follow union as a matter of course. Should this raise any difficulty, he would suggest that the union take place on January 1st, 1900, when such an election would naturally take place. He invited all members present to express their opinions as to possible methods of union.

This invitation was accepted by nearly all those present. All who spoke appeared to be in substantial agreement with the views expressed by the President.

WESTERN SUBURBS MEDICAL ASSOCIATION OF SYDNEY.

THE ninth annual meeting of the above Association was held at Aarons' Hotel, Sydney, on Friday, April 22nd, at 8.15 p.m. After the minutes of the last annual meeting had been read and confirmed,—

Dr. MAGUIRE, the retiring president, read his address, which was of a most interesting character to the profession at large, and very cordially received; after a hearty vote of thanks had been given him for the way that he had carried out the duties of the presidential chair, he returned thanks and vacated his position, and introduced his successor, Dr. G. H. Abbott, of Stanmore. This finished the annual meeting, and the members of the Western Medical Association adjourned to the large dining-room and

held a smoke concert—to which had been asked several of their medical friends in Sydney and the other suburbs. Upwards of 86 accepted the invitation, and fully that number attended, and a most pleasant evening was passed. Drs. Maguire, McIlroy, S. H. Hughes, Muskett, and Chas. MacLaurin, together with Messrs. Asprey and Pier, supplied some capital singing, music, and comic recitations and imitations.

Among those present we noticed Drs. Evans, Knaggs, Mullins, Collins, Foreman, Abbott, Coutie, Frizell, Maguire, Hughes, Blackburn, Sands, Fairfax, Magarey, McIlroy, Muskett, O'G. Hughes, Hodgson, Gwynne-Hughes, Pope, Blackwood, Chas. MacLaurin, Harold Browne, Allan, Brady, R. Vandeleur Kelly, Brennand, MacMaster, Hetherington, G. Marshall, Thring, Jenkins, Stacy, Schrader, Cargill, T. G. Wilson, Warren, Dixon, Blaxland, MacCormick, Clarence Read, MacSwinney, W. Chisholm, A. J. Hood, O'Hara, Sinclair Gillies, Bennet, Pym, Crabbe, Walker-Smith, Barkas, Kirkland, Scot-Skirving, Ellis, Worrall, Wright, Harrison, W. McMurray, Gledden, Bucknell, Pockley, West, Martin, Sanderson Lloyd, MacLeod, Clay, Pain, Cosh, Barrington, Doak, McCarthy, Service, Sheldon, G. Armstrong, Adam Dick, P. Moore Wood, Littlejohn, Robertson, Ed. Warren, Mailler Kendall, Chenhall, Kyngdon, Pickburn, Marano, S. H. Hughes, Murray Will, Green, Hester, Hinder, Amess, Dey, and Ludlow.

NEW SOUTH WALES MEDICAL UNION.

At a meeting of the Council of the New South Wales Medical Union, held on May 2nd, Dr. F. H. Quaife was unanimously re-elected chairman for the current year. Drs. Quaife, Knaggs, Crago, Jarvie Hood and Mullins were re-elected Election Sub-committee. Mr. C. W. Grigson was appointed Assistant Secretary.

LETTERS TO THE EDITOR.

BREWARRINA DISTRICT HOSPITAL.

(To the Editor of the Australasian Medical Gazette.)

DEAR SIR,—In your editorial of this month you draw particular attention to a gross case of hospital abuse in our District Hospital.

The gentleman referred to, has for years been the respected President of our institution and *its most liberal supporter*. He drove in from his home sixty miles away to consult me. My diagnosis was typhoid. There was no house in the town able or willing to accommodate such a case, and no skilled nursing of any kind available. At my suggestion, no other course being open, he was moved into one of the small fever wards of the Hospital. While an inmate he *provided* privately at *his own cost* every article of diet he consumed, and all spirits, cordials, ice, and medicines. For the accommodation in the ward and for the nursing he paid the Hospital the sum of forty pounds (£40). I, as his medical attendant, received the same liberal fees as if he were treated outside.

Since his connection with the institution the same gentleman has donated about four hundred pounds (£400) to the funds. In justice to him, the wrong impression which your article conveys should at once be removed.

We country practitioners suffer but little from hospital abuse in our own local hospitals, but we suffer much from the abuse of metropolitan hospitals. I could quote you many cases of people, in by no means poor circumstances, who, daring not to show their meanness in a local institution, have left here to

obtain cheap treatment from specialists in the Sydney hospitals, and thus save the moderate fees of the country practitioners. I could also quote some cases where they have even been provided with free railway passes by our paternal Government to achieve their ends.

Yours truly,

DONALD LUKEB, M.B., CH.M.,
Medical Officer Brewarrina District Hospital.

22nd April, 1899.

[We have much pleasure in inserting this disclaimer by Dr. Luker, and must admit that this is one of those very few cases in which such an exception could be made.—ED., A. M. G.]

REVIEW.

PEDIATRICS: THE HYGIENIC AND MEDICAL TREATMENT OF CHILDREN. By Thomas Morgan Rotch, M.D., Professor of Diseases of Children, Harvard University. Illustrated. Philadelphia: J. B. Lippincott Company. Sydney: Charles Markell and Co., 15 O'Connell Street. Price, 28s.

The ailments peculiar to the earliest years of life are so characteristic as to demand special study for their successful treatment. Many works are published dealing with the diseases of children—many of them excellent in their way—but we have little hesitation in saying that these members of our profession who have not read Professor Rotch's work have much yet to learn on the subject of pediatrics. If Dr. Rotch had never written anything but the articles on Infant Feeding, he would deserve well of the profession throughout the world.

The work is divided into xviii. parts, of which the first two deal with the normal infant and its development. Then follows a chapter on the Hygiene of the Nursery.

To our mind Division IV.—Feeding—is one of the most practical articles on the subject ever written. It contains the carefully thought out results of years of patient toil. What the public in the United States owe to the author will probably never be known, and certainly never sufficiently appreciated as it should be. Professor Rotch has taught us that our haphazard ways in feeding children are unscientific, and having destroyed our primitive views on this subject, has built up a system of rational feeding which must be the system of the future.

Premature infants and their treatment receive special attention. Beyond these, the various maladies of the young are dealt with in a masterly manner. The various systems receive due attention.

The work (which contains over 1,100 pages) is splendidly illustrated with eight full page plates in colours, and nearly six hundred other representations from photographs, diagrams, and charts.

We have very much pleasure in recommending the close study of this intensely interesting and practical work.

(Reviews continued, page 220.)

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 26th May, at 8.15 p.m.

Business:—General.

G. T. HANKINS, Hon. Secretary.

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

The Australasian Medical Gazette and the British Medical Journal are supplied to all Financial Members of the New South Wales, South Australian, and Victorian Branches Free of Cost.

Subscriptions (£2 2s. per annum) should be forwarded to the respective Branch Treasurers as below:—

New South Wales, Dr. Crago, 18 College Street, Sydney; South Australia, Dr. T. W. Corbin, Adelaide; Victoria, Dr. J. R. M. Thomson, Essendon, Victoria.

The Gazette is supplied to Members of the New Zealand and Queensland Branches by special arrangement with the local Secretaries.

SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

EDITOR'S LIBRARY.

THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY

R. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A.; AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH MAY, 1899.

EDITORIALS.

HOSPITAL STATISTICS.

At the laying of the foundation stone of the new Infectious Diseases' Block, at the Adelaide Hospital, by Lord Tennyson, on the 4th inst., the Chairman of the Board, Mr. Charles Tucker, M.P., is reported in the *S. A. Register* of Friday, May 5th, to have made the following remarks *inter alia*:—

He might with pardonable pride be permitted to institute a comparison between the Adelaide Hospital and similar institutions in the other colonies. In 1897

the expenditure in connection with the Adelaide Hospital was £17,568, and the patients numbered 2,740; the following year the expenditure was £17,564, or £4 less, despite the fact that there were 3,246 patients, an increase of 506. In Sydney a hospital of about the same size cost £20,000 a year to maintain, whilst a similar institution in Melbourne involved an outlay of £23,000 yearly. Moreover, the mortality in the Adelaide Hospital was only 7.1 per cent., as against 10 per cent. in Sydney. (Applause.) Before concluding he had great pleasure in asking His Excellency's acceptance of a bound volume of the last annual report of the Hospital Board.

Such statistics and comparisons are utterly valueless and misleading, unless a further comparison, as to the nature and severity of the cases treated, can be made. Assuming the statistics to be true, which we doubt, it is well known that the mortality at the Sydney and the Prince Alfred Hospitals is much increased by the many shipping, railway, and tram accidents which occur in Sydney, and are taken to these hospitals to die—in many cases within a few hours. Again, the number of major operations performed in either of these institutions, would, in all probability, amount to five times as many as those performed in the Adelaide Hospital.

The *South Australian Register*, of Saturday, May 6th, in a leading article on "Health and the Hospital," after pointing out that the public subscriptions and payment by patients have both fallen off to an enormous extent, and stating that "the conclusion seems inevitable—if not that some patients are taken in for trifling causes—at least that the liberality of the State is being abused in many cases," concludes the leader with the following pertinent remarks:—

This should be considered in connection with the statements made by the Chairman of the Adelaide Hospital on Thursday concerning the institutions in Melbourne and Sydney in contrast to our own. The latest statistics available to us do not, however, even if regarded apart from varying circumstances, confirm Mr. Tucker's gratulatory deductions. In 1898—a specially favourable year—£17,565 was spent upon the Adelaide Hospital with 3,246 in-patients and 17,468 attendances of out-patients. In the Sydney Hospital, according to the latest issue of "Hospitals and Charities," £17,963 was expended in 1896 with 4,293 in-patients and 88,747 out-patients' attendances; while the figures relating to Melbourne Hospital are—Expenditure, £24,402; in patients, 4,625; out-patients, 16,323. One effect, however, hospital statistics produce—they serve to emphasize our contention that the charity of the State is being sadly abused in connection with the Adelaide Hospital.

REGISTRATION OF NURSES IN N.S.W.—A general meeting for the discussion of the registration of nurses will be held in the Royal Society's House, Elizabeth-street, on Friday, 2nd June, at 8.30 p.m. The members of the medical profession, matrons, sisters and nurses are invited to attend. Frances G. Spencer, hon. sec.

THE SYDNEY AND SUBURBAN PROVIDENT MEDICAL ASSOCIATION.

THE Sydney and Suburban Provident Medical Association, at its last quarterly meeting, showed itself to be in a very satisfactory position financially. The meeting of members was a small one, and the business mostly routine. A suggestion came from one of the members for the committee to start some kind of industrial insurance fund which, the speaker thought, through its profits and medical fees would be of certain pecuniary advantage to the members. Very little support was given to the suggestion, and it was decided that the society's best plan was to continue as at present. Under the present arrangement the society cannot possibly be rendered insolvent; its only liabilities are those incurred by the medical staff and chemists, *i.e.*, attendance and the supply of medicine. Any epidemic or unusual amount of sickness can only call on the services of the medical men and not on the funds of the institution. Through the energy of a few, and the financial support of a number, the society started, maintained itself, and now it is in the pleasing position of freedom from any financial obligations; it renders income to those of the medical profession who are on its staff equal to the ordinary lodge rates. It may be claimed that this society opposes no other benefit society, nor does it interfere with the private work of any individual practitioner; this latter statement has been challenged and by a few will always be challenged. Such a minority must be expected to exist, but will decrease as the society's work becomes more evident. The general statement may be made that through the society's agency at present about £1,800 per year is collected from the poorer classes to insure them attendance and medicine, which otherwise would have to be provided by means of public or private charity. Such a movement must help some little towards reducing the present overcrowding of our hospital wards and out-patient department and, moreover, has a good educative influence on the poorer and more improvident classes. It teaches them that medical treatment must be paid for except in cases of real destitution; it shows that persons with limited incomes can have a doctor's services without imposing on our public charities or asking gratuitous service. The tactics of the society, the small weekly house to house collection, form the rock on which the medical profession split, although the profession as a body, with only a few dissentients, approved of its mode of action; they thought that at such a critical period strong measures were needed

to overcome the establishment in our midst of a large association most detrimental to the interests of the profession. The nucleus of an opposition society was formed, and that nucleus has grown to a position now that speaks for itself. Its effect on the opposition body is noted in those districts where the medical men have favoured the scheme of the Sydney and Suburban and helped its progress. In districts where the opposition society is the strongest, medical men are apathetic about it. An indication of the growing independence of this effort is seen in the fact that it can now maintain its position without any efforts at canvassing for members, and it looks to the medical men chiefly to recruit its ranks by recommending their poorer patients who cannot, or will not, pay ordinary fees, to join it.

AMBULANCE NURSING CLASSES.

WE think the attention of the profession should be drawn to the possible harm, not only to medical men but to trained nurses, that might be done by extending ambulance teaching beyond the first aid principles. We see advertisements in the daily press inviting the public to join classes, both first-aid and nursing. If certificates are issued for this latter class, we beg to point out the temptation that may be induced for such certificates to be used for a wrong purpose. On more than one occasion women who have attended female ambulance classes combine their ambulance certificate with one from a medical man connected with some lying-in institution, and style themselves trained nurses. Moreover, they become engaged, and some at the full fee of £2 2s. per week. The Civil Ambulance and Transport Brigade have discontinued holding classes indiscriminately, this body, having now established itself, and trained sufficient workers to carry on the practical work in which it is engaged, will only undertake any instruction when they need trained workers. Women adopting the calling of nurses abound; there is hardly sufficient work to afford employment for those whom our hospitals have trained by years of study. In the encouragement of ambulance nursing classes we see a certain injustice to our trained nurses—if not to ourselves—as a profession. We think anything except first-aid teaching in ambulance work should be discouraged, and care exercised how certificates are granted to females, lest they be used for a wrong purpose. The matter of a trained nurses' register is an important one, and we wish to draw attention to the notification of a meeting upon the subject of Registration of Nurses at page 213.

BRA'S ALLEGED DISCOVERY.

THE following newspaper cutting is taken from the *S.A. Advertiser* of April 14th, 1899:—

THE CAUSE OF CANCER.

A NEW DISCOVERY.

INTERESTING INTERVIEWS.

Dr. Ramsay Smith, senior physician at the hospital, who has given much time to the study of cancer in man as well as in the lower animals, was also seen, and in the course of a short interview he gave some interesting information. He was asked—"If the cancer germ has been discovered, what will be the effect on medical treatment?"

"Probably bad," he replied, "because it will let loose a number of inexperienced experimenters. The amount of injury that was done to patients after the discovery of the tubercle bacillus, the bacillus of diphtheria, and others, was almost incalculable. Medical treatment in the present day is founded too much upon scientific fads and fashions and theories that may have little or much truth in them."

"But surely the discovery of the cancer germ would be of some value?"

"As a contribution to science it would. In tuberculosis the attempt to combat the parasite, instead of treating the patient, has brought great discredit upon medical treatment. No doubt the growth of the parasite is hindered to some extent, but the patient is killed in the process."

"Has not the anti-toxin given splendid results in diphtheria?"

"There is such a conflict of opinion on this subject that one cannot answer the question one way or another."

"Do you use anti-toxin serum in the Adelaide Hospital for diphtheria?"

"We have had all sorts of bad cases during the last two years and a half. We have never used anti-toxin, and we have never had a death. We use the anti-toxin serum for growing microbes in. It is unequalled for this purpose."

"Is cancer a curable disease?"

"Three years ago Rabagliati told me that after working at the subject for many years he had come to the conclusion that cancer was a preventible though an incurable disease, and that has come to be largely accepted. On the other hand, there have been cases of undoubted cures."

"I understand you have had some investigations of the disease made at the Adelaide Hospital?"

"Yes. These investigations have been along two lines—Firstly, microscopic methods of examination and staining, by which cancerous tissue can be studied in a way that has hitherto been impossible; and secondly, in the medical treatment of inoperable cases of cancer. These cases have been proved clinically and microscopically to be cases of undoubted cancer. All of them have benefited by treatment, and in several instances little or no trace of the disease has remained after some weeks of treatment. The cancerous swelling has disappeared, the pain has gone, the patients' condition has improved, and they have been able to resume work."

"What reason can you assign for the disease occurring amongst civilised nations and not amongst savages?"

"Part of the answer would have to deal with the geographical and racial distribution of disease in general, but there is no doubt that cancer is a disease depending on conditions of the nervous system, and the chief cause of cancer may be stated in one word—worry. The high pressure of civilised life accounts for the steady increase in cancer which has occurred within the last 30 years. A small part of that increase may be due to more exact diagnosis and greater care in the Registrar-General's returns."

The "use of anti-toxin serum for growing microbes in" is information decidedly novel and instructive, though we fear that no institution other than a Government one could afford to use such an expensive culture medium.

The remarks on the cure of cancer appearing in the public press are somewhat reminiscent of the advertisements of a well-known "lady specialist," also a cancer curer, that used to appear in the same newspaper: "Cases given up by other doctors preferred!"

THE INTERCOLONIAL MEDICAL CONGRESS OF AUSTRALASIA.

THE preliminary details in connection with the forthcoming congress are now well in hand, and a successful meeting is anticipated by the executive committee in Brisbane. The names of president, treasurer, general secretary, and local secretaries in the various colonies have already been published in the columns of the *A. M. Gazette*.

The list of presidents and vice-presidents in various sections is not yet complete, but the following gentlemen have been elected, and have accepted office:—

Section 1. Medicine:—President: R. Scot Skirving, M.B., C.M., Elizabeth-street, Sydney. Vice-Presidents: E. J. Jenkins, M.D., M.R.C.P., Macquarie-street, Sydney; W. T. Hayward, M.R.C.S., L.K.Q.C.P.I., Norwood, Adelaide; D. Colquhoun, M.D., M.R.C.P., Dunedin; W. G. Maddox, M.R.C.S., L.R.C.P., Launceston.

Section 2. Surgery:—President: A. MacCormick, M.D., C.M., Macquarie-street, Sydney. Vice-Presidents: C. P. B. Clubbe, L.R.C.P., M.R.C.S., Macquarie-street, Sydney; W. Moore, M.D., Ch.M., Collins-street, Melbourne; W. A. Giles, M.B., C.M., Adelaide; G. Cleghorn, M.R.C.S., L.S.A., Blenheim, N.Z.; R. S. Bright, M.R.C.S., L.S.A., Hobart.

Section 3. Eye, ear, nose and throat:—President: H. Lindo Ferguson, M.D., L.K.Q.C.P.I., Dunedin. Vice-Presidents: A. J. Brady, L.R.C.S.I., L.K.Q.C.P.I., Lyons' Terrace, Sydney; W. Odillo Maher, M.D., M.R.C.S., College-street, Sydney; A. L. Kenny, M.B., Ch.B., Collins-street, Melbourne;

T. K. Hamilton, M.D., F.R.C.S.I., Adelaide; C. E. Barnard, M.D., M.R.C.S., Hobart; F. Wallace Mackenzie, M.B., C.M., Wellington, N. Z.

Section 4. Midwifery and gynecology:—President: M. U. O'Sullivan, L.R.C.P. and S.E., Collins-street, Melbourne. Vice-Presidents: E. T. Thring, F.R.C.S., L.R.C.P., Macquarie-street, Sydney; G. Rothwell Adam, M.B., C.M., Collins-street, Melbourne; A. A. Hamilton, M.B., Ch.B., Adelaide; T. M. Hocken, M.R.C.S., L.S.A., Dunedin; J. E. Wolfhagen, M.B., C.M., Hobart.

Section 5. Public Health (including State Medicine, Psychological medicine and Demography:—President: J. Ashburton Thompson, M.D., M.R.C.S., L.R.C.P., D.P.H., etc., Macquarie-street, Sydney. Vice-Presidents: F. Ogston, M.D., Ch.M., Dunedin; T. Borthwick, M.D., C.M., Adelaide; T. Hope Lewis, M.R.C.S., L.S.A., Auckland; E. J. Crouch, M.R.C.S., L.S.A., Hobart.

Section 6. Anatomy, Physiology, Pathology and Pharmacology. President: Not yet elected. Vice-Presidents: J. T. Wilson, M.B., C.M., University of Sydney; H. Marten, M.B., M.R.C.S., Adelaide; W. S. Roberts, M.R.C.S., Dunedin; G. H. Ogg, M.B., Ch.M., Launceston.

The list of vice-presidents of congress will appear in a future issue.

The date of meeting has been definitely fixed for September 18th to 23rd, 1899.

The Governors of all the Australian Colonies, the Lieutenant-Governor of New Guinea, and the Admiral on the Australian Station have, as on former occasions, signified their willingness to become patrons of the congress.

The following gentlemen have also accepted the office of Patron, viz.:—Sir Samuel Walker Griffith, K.C.M.G., Chief Justice of Queensland, Sir James Wilson Agnew, K.C.M.G., of Hobart.

The following concessions have been made by the railway authorities in the various colonies and the Intercolonial Steam-shipping Companies, the Railway Commissioners of New South Wales, Victoria, South Australia and Tasmania, have consented to allow single fares for the double journey to members of congress and their wives—also similar reductions from country places to metropolis in the case of Victoria and N. S. Wales. The New Zealand Government will grant similar concessions. The Queensland Railway Commissioner has been approached, and it is hoped that free passes will be obtained over Queensland lines for members and wives. Messrs. Howard Smith and Sons offer a reduction of 10 per

cent. on present rates. The A.U.S.N. Co. cannot grant reduction on present low fares, but if rates should rise to old level before September next will allow the usual 20 per cent. discount. Union S.S. Co. will allow 10 per cent. on return tickets.

A first circular has already been sent to the members of the profession in Australasia, and the second circular will be issued, giving details of reductions in fares, trips, etc.

Dr. Wilton Love, Secretary to the Intercolonial Medical Congress of Australasia (fifth session), writes as follows:—

“Briarbane, May 9th, 1899.

“Some of the Southern members of Congress have expressed a fear that the date selected for the meeting of Congress, viz., from the 18th to the 23rd of September, will prove uncomfortably warm. I have therefore obtained from the Government Meteorologist the records for the period in question for the past five years, from which you will see that there is no occasion for their apprehensions.”

Mean shade temperature from Sept. 18th to 23rd (1894-98)	=	65°·16
Mean maximum in shade	=	81°·5
Mean minimum in shade	=	50°·52

We have much pleasure in drawing attention to a new method of suturing the peritoneum advocated by Mr. Henry M. O'Hara, F.R.C.S.I. (page 190), Senior Hon. Surgeon to the Alfred Hospital, of Melbourne. Should the chief points which he claims for his method be borne out by further experience in the hands of other surgeons they will be very advantageous, as they are as follows:—1st, Freedom from adhesion to intestine. 2nd, A stronger abdominal wall to resist post anæsthetic vomiting. 3rd, A complete barrier to any leakage of blood or pus from the more superficial structures. 4th, Simplicity of technique.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC GOWER STREET, LONDON, W.C.—We have much pleasure in drawing the attention of the profession of these colonies to an advertisement which appears in our columns with reference to the above institution. The object of the Medical Graduates' College and Polyclinic is to increase the facilities offered to medical men for acquiring technical skill advancing their scientific and clinical knowledge. Amongst the list of officers of the Council and other officials we find some of the most eminent physicians and surgeons of the United Kingdom. (See page xxiv.)

HUDSON'S "EUMENTHOL" JUJUBES (Registered), are a Gum Jujube containing the active constituents of well-known Antiseptics, Eucalyptol, Thymus Vulg., Pinus Sylvestris, Mentha Arv., with Beno Borate of Sodium and Rhatany, and exhibit the antiseptic properties in a fragrant and efficient form. Sold by all chemists, tins 1s. 6d., free samples to Physicians on receipt of card. G. Hudson, Chemist, Ipswich (Q.). Sydney Depot, 5 and 7 Queen's Place.

LONDON LETTER.

The Röntgen Rays—A "Mystical Healer"—Antarctic Exploration—A Cancer Organism.

THE injurious effects upon the skin which may result from the use of the Röntgen rays has been the subject of an action for damages, brought by a French lady against a radiograph specialist. The patient, it appears, was suffering from some internal complaint, and being unwilling to undergo an operation, agreed to the application of the X rays for the purpose of diagnosis. Three sittings were given; the first lasted forty minutes, the second forty-five minutes, and the third an hour and a quarter, but all with negative results. After the second sitting, the skin appeared red and inflamed, and after a few days a large sore, some twenty centimetres square, was the result. As is usual in these cases, the wound took a long time to heal, and led to considerable suffering and prolonged illness. The radiographer was sued for negligence, and £200 damages claimed. Medical evidence was called for the defence, and it was urged that accidents of this nature, like the action of many drugs, depended upon the patient's idiosyncrasy. The Court reserved judgment. This is, I believe, the first time that these occasional untoward results of the use of the Röntgen rays has been made the subject of a law suit, though it has long been known that such conditions of the skin may result, and operators, who are frequently exposed to the rays, have been advised to protect their hands by some greasy application.

A Dr. Edward, who is said to have been practising medicine somewhere in Australia up to six years ago, is at present in Paris, where, as a "mystical healer," he is drawing a large number of blind, deaf, dumb and others suffering from the manifold ills of the flesh, and performing marvellous cures. As many as 250 patients in the day are said to attend at his consulting rooms. Having first enquired, through a lady interpreter, from each patient the nature of his complaint, he proceeds to make mesmeric passes over the region affected, and then makes a motion of picking out the pain and throwing it on the floor, at the same time keeping his eyes firmly fixed on the patient, and assuring him that the pain has gone. He has visited several parts of the world with "great success," so that he may, in course of time, again bend his steps Australiawards.

The Antarctic Exploration movement is again prominently before the public. The President of the Royal Geographical Society, Sir Clements Markham, at the opening of the session, appealed for further subscriptions to enable them to efficiently equip the expedition to the South Pole, to make observations in all branches of science. At a meeting of the Society held this week, the President announced the donation of £25,000 to the fund by Mr. Llewellyn Longstaff, a Fellow of the Society for many years. Lord Lister, in congratulating the President and the Society upon the munificent gift, said it was a peculiar pleasure to him to do so, as the donor was himself the son of a distinguished member of the medical profession. It is expected that the expedition will sail in July next, and will co-operate with a German expedition starting about the same time, and will be away two seasons at least.

The recent paper communicated to the Royal Society of London by Mr. Plimmer, Bacteriologist to St. Mary's Hospital, London, on the cultivation of an organism from a fresh cancer of the breast, is one of more than usual interest. Mr. Plimmer has been engaged for

several years in this line of research, and his results, so far, seem to be more promising than any other in this field. The organism, which he has cultivated on a medium containing fresh cancer juice, appears to be of the nature of a yeast, and presents in its life history phases closely resembling the bodies found by Ruffer and Plimmer in cancerous growths. These bodies were believed by them to be organisms, though all attempts to cultivate them had hitherto failed. The results of further experiments with the organism will be awaited with interest, and I suppose when once the organism is definitely isolated and proved, we shall soon hear of an anti-cancer serum, and our surgical friends will be obliged to seek fresh woods and pastures new for the exercise of their operative skill.

London, March 29th, 1899.

PUBLIC HEALTH.

THE New South Wales Board of Health has issued three pamphlets dealing with the prevention of typhoid fever, scarlet fever, and diphtheria respectively. These pamphlets have been issued to local authorities, who are required by regulation to serve a copy of the one which deals with the disease notified on the householder of the house where the case is. The pamphlets are identical as regards the points on isolation, disinfection, and exposition of the public health laws, but the parts describing the diseases naturally differ. We welcome these useful publications with genuine pleasure.

The Health Officer for Hobart (Dr. Sprott) reports that during the month of March there were 46 deaths in the registration district of Hobart. In the city there were 26 deaths—Males, 15; females, 11—giving a death-rate equal to 19.82 per 1,000 per annum. The principal causes of death were:—Typhoid fever, 1; diarrhoea, 3; cancer, 1; tuberculosis, 4; old age, 2; pneumonia, 1; enteritis, 3; and the remainder were of a general nature.

Considerable discussion took place at the Tasmanian Central Board of Health last meeting on a letter from the Chief Secretary, stating that as Federation was probably near at hand the erection of a quarantine station at, or near, Launceston should be held in abeyance. The medical members of the board deprecated any delay, and the matter is to be further discussed at the next meeting. The secretary was instructed to report on a site and buildings for an Infectious Diseases Hospital for the Hobart district.

At a meeting of the Central Board of Health, Tasmania, the President intimated to the Board that to enforce the Vaccination Act of 1898 it would cost £1,000 per annum, but the Government did not appear anxious to provide the necessary means. The Act is a dead letter so far.

Tasmania shows many living evidences of the healthfulness and long endurance of an open-air life. Instance the records of deaths appearing lately in the obituary columns of the press. Ten demises ranged from 61 to 105 years, including four over 80, the average for the ten being 75 9-10. Of the ten deaths seven were those of females, ranging from 61 to 105 years old. All of these were relicts of better halves who had "gone before," and statistics prove that married people live longer than unmarried, and that women live longer than men, but this does not detract from the fact that residence in the Australasian colonies is conducive to long life, and especially residence in Tasmania.

VITAL STATISTICS.

NEW SOUTH WALES.—A report on the vital statistics of New South Wales for the years 1896-97-98 has just been issued by the Registrar-General. The total number of deaths has risen from 14,264 in 1897 to 16,661 in 1898. The deaths from the following diseases show a large increase:—Measles (4, 3, 509), influenza (202, 196, 329), whooping cough (100, 18, 241), chronic alcoholism (86, 70, 109), diseases of the circulatory system (1,034, 1,045, 1,238), bronchitis (571, 466, 777), pneumonia (828, 730, 973), enteritis (935, 818, 1,001). The following diseases show smaller increases:—Diphtheria, cancer, phthisis, Bright's disease, uræmia. On the other hand, typhoid fever (509, 327, 387), diarrhoea (829, 547, 625), rheumatism (35, 40, 18), convulsions (584, 446, 433), sunstroke (253, 57, 46) show a decline in the number of deaths.

SYDNEY.—There were 990 births and 447 deaths registered in Sydney during March. The principal causes of death were:—Typhoid fever, 19; enteritis, 57; pneumonia, 15; cancer, 30; phthisis, 42; whooping cough, 14. There were 6 suicides. There was one death from leprosy, the victim being a native of India, who had been six years in the colony. A Chinaman, aged 33, died of beri-beri.

MELBOURNE.—The chief causes of death in greater Melbourne during March were as follows:—Diphtheria, 7; cancer, 35; phthisis, 41; whooping cough, 21; bronchitis, 9; typhoid fever, 32; pneumonia, 32. There were 644 deaths registered during the month.

ADELAIDE.—There were 76 births and 68 deaths in Adelaide during February. The principal causes of death were:—Measles, 1; whooping cough, 1; cancer, 5; phthisis, 7; old age, 8; enteric fever, 3; enteritis, 2.

TASMANIA.—The Government Statistician's report on vital statistics of the colony shows that during the month of March 115 births were registered in Hobart and Launceston. Deaths—The deaths registered in January in Hobart and Launceston numbered 81. The deaths under 5 years of age numbered 29, or 45·81 per cent., of which 22 were under 1 year of age.

NEW ZEALAND.—During February, the number of births and deaths respectively were in Auckland, 111, 58; Wellington, 127, 34; Christchurch, 94, 68; Dunedin, 80, 38. Total births, 412; total deaths, 198. In the four cities there were deaths from measles, 5; cancer, 11; phthisis, 14; diarrhoea, 88; old age, 9; pneumonia, 6. During March there were 6 deaths from measles, 8 from diphtheria, 7 from typhoid fever, 26 from diarrhoea, 13 from cancer, 13 from phthisis, 10 from old age, 15 from heart disease.

BALLARAT.—During March there were three deaths from typhoid fever, 2 from cancer, 3 from phthisis, 4 from pneumonia, 9 from enteritis, 1 from snakebite.

UNIVERSITY AND HOSPITAL INTELLIGENCE.

ST. VINCENT'S HOSPITAL, SYDNEY.

THE Forty-first Annual Report of this estimable charity is published.

The pamphlet shows that the work of the hospital is increasing. There were remaining in hospital on December 31st, 1897, 108; admitted during the year, 1,557; total, 1,665. Of this number there were cured, 1,083; relieved, 373; unrelieved, 16; deaths, 83; remaining in hospital, December 31st, 1898, 110.

Rate of mortality over all cases under treatment, 5·3 per cent. The mortality amongst typhoid fever cases, of whom there were 24 treated, was 3·8 per cent. There was an increase of 139 in-patients over the record of the preceding year's return. In the out-door department there were 7,644 patients treated, their attendances numbering 22,757; and in this department the figures show an excess of 3,165 over those of 1897. There were 763 operations during the year, with 20 deaths. The number of hydatid cases operated upon was 10; the number of cases treated was 14, viz., hydatid of liver 9, of breast 1, of neck 1, of lung 1, of mesentery 1, of omentum 1.

The financial statement is more encouraging than that of the preceding year. It is to be found on pages 28 and 29 of the report. It shows an expenditure of £5,045 5s. 2d. during the year, portion of which (£457 10s. 1d.) was used in liquidating bank overdraft of previous year. The receipts amount to £4,550 13s. 11d., which, together with £477 8s. 1d., of unrepresented cheques, leave the small sum of £17 3s. 2d. as bank overdraft to balance last year's increased work as compared with the above sum (£457 10s. 1d.) required for 1897.

The Building Account is in a most satisfactory state, there being a balance of £3,503 19s. 7d.

Recently a deputation from the staff of the hospital waited upon the New South Wales Colonial Secretary with a view to obtaining a grant of £2,000 for the erection of a new and up-to-date operating theatre. The request of the deputation was favourably received by the representative of the Government, who promised to place the matter before his colleagues.

SYDNEY HOSPITAL FOR SICK CHILDREN.

ANNUAL MEETING (1899).

The nineteenth annual meeting of the Sydney Hospital for Sick Children was held on April 10th. The chair was occupied by his Excellency the Lieutenant-Governor (Sir Frederick Darley).

The annual report showed that during the past year 385 patients had been admitted, making, with the 44 remaining from the previous year, a total of 429 patients under treatment. Of this number 240 were discharged cured, 66 were relieved, 83 were discharged unrelieved, 50 died, and on December 31st there were 40 remaining in the hospital. 161 had been admitted to the diphtheria cottage, making, with the 5 remaining from the previous year, a total of 166 patients under treatment. Of these 125 were discharged cured, 26 died, and on December 31st there were 5 remaining in the wards. There had been 10,885 attendances out of 4,012 out-patients. In the diphtheria wards the death-rate was 17·2 per cent., as compared with a rate of 18·78 per cent. for last year. In out-patients there was an increase on last year of 3,716 attendances and 1,220 patients. Government grants to the extent of £250 for the diphtheria ward—equivalent to rent of the cottage—and the ordinary £ for £ subsidy on subscriptions and donations had been made. Donations and contributions, including legacies, reached the total of £1,818 4s. 4d., about £165 more than last year. The year 1898 commenced with a debit balance of £374 6s. 1d., but the accounts showed that this had been reduced, and the year 1899 started with a debit balance of only £155 10s. 5d.

WANTED, copies of *Lancet*, March 6, 1897, and Aug. 27, 1898.—*Australasian Medical Gazette* Office, 121 Bathurst-street, Sydney.

UNIVERSITY OF SYDNEY.

THE monthly meeting of the Senate was held on April 10th. The Chancellor (the Hon. Dr. MacLaurin) presided. The annual election of the Vice-Chancellor resulted in the re-election of his Honor Judge Backhouse. The degree of bachelor of medicine was conferred upon Messrs. J. Mackenzie and J. C. Windeyer. A letter was received from the Agent-General for New South Wales conveying amended regulations relating to nominations to commissions in the British Army by colonial Universities. A letter was received from his Excellency the Naval Commander-in-Chief covering a communication from the Lords Commissioners of the Admiralty, stating that their Lordships had approved of certain desired modifications in the regulations for the entry into the medical branch of the navy of candidates proposed by colonial Universities. On the recommendation of the Dean of the Faculty of Medicine, it was resolved that Dr. C. P. B. Clubbe be appointed to lecture on clinical surgery in the place of Dr. McAllister (absent on account of ill-health) until his return. A letter was received from Professor Wilson, recommending the appointment of a fourth year student, distinguished in practical anatomy, as a junior demonstrator in anatomy for one hour a day, with an honorarium of £5 per term. The recommendation was adopted. The draft annual report for presentation to Parliament, which had been circulated, was adopted. Reports from the examiners in the Faculty of Medicine, conveying the results of the recent examinations, were received and adopted. The standing committee for the year 1899 for the Museum of Anatomy was appointed as follows:—The Dean of the Faculty of Medicine, the professor of anatomy, the lecturer in pathology, *Professor of Physics*.—On the motion of Mr. Alexander Oliver, seconded by Mr. H. C. Russell, it was unanimously resolved that Mr. J. Arthur Pollock, B.Sc. Syd. 1889, be appointed to the chair of physics (vacant by the resignation of Mr. R. Threlfall).

ZEEHAN HOSPITAL, TAS.—The Board of Management has decided to appoint a Resident Surgeon, owing to difficulties having arisen with the honorary medical staff.

QUEENSTOWN HOSPITAL, TAS.—Reported to be very much overcrowded in consequence of the number of typhoid fever cases.

HOSPITAL ABUSES.

WALGETT, N.S.W.—Taking into consideration the recent correspondence relating to the hospital at Walgett, N.S.W., medical men should be careful in accepting the post advertised as follows:—

A LEGALLY qualified MEDICAL MAN required, to act jointly with another Doctor; salary, £150 per annum, with private practice. Commence duties early as possible. Applications, accompanied by qualifications and testimonials, to be in hands of Secretary not later than 3rd May next. THOMAS OLARKE, Secretary, Walgett Hospital, Walgett.

KALGOORLIE, W.A.—Articles in the *Kalgoorlie Miner* of March 21st, 22nd, and 23rd, entitled "Hospital Economics; a Study," have been creating great interest in the "Abuse of Hospitals" throughout Western Australia and other colonies.

MEDICAL NOTES.

PRESENTATIONS TO MEDICAL MEN.

DR. JAMES GRAHAM, of 183 Liverpool Street, Sydney, was on May 5th tendered a banquet by a number of his admirers. Alderman M. Harris, M.P. (Mayor of Sydney, presided at the gathering, which included Messrs. Lee (Minister for Justice), Whiddon, Henry Clarke, Morgan, and S. E. Lees, M.S.P., Alderman Barlow, Mr. Palmer (Town Clerk), Alderman Waine, and Fell. The main object of the meeting was a presentation to Dr. Graham in the form of a silver salver service by some of his electors and friends, in recognition of his many acts of kindness and his public services. The ceremony was performed by the Mayor, who, in a well chosen speech, referred to the many excellent characteristics of their guest in his dual capacity as an alderman of the City of Sydney and as a member of the Legislative Assembly of New South Wales. These sentiments were echoed by a number of other speakers, to all of whom Dr. Graham made a suitable reply.

Dr. Joseph Stapleton, of Lambton, N.S.W., who is leaving the district for a tour through England and America, has been presented with an illuminated address and a purse of sovereigns. The attendance at the presentation was representative of Lambton and the surrounding suburbs of the City of Newcastle. A number of leading gentlemen testified to the many good qualities of the popular doctor, and expressed the wish that he would enjoy his holiday, and return to the district greatly benefitted in every way.

MEDICO-LEGAL.

KISSING THE BOOK.—The celluloid-covered Bible is the latest sanitary invention in New York. After being kissed by a witness it is washed in a strong disinfectant, and thus the ubiquitous bacillus is deprived of his chance. The reform is well worthy of the attention of our courts, which it is safe to say it will not receive.

MEDICAL MAGISTRATES.—Dr. William Frederick Bassett, J.P., has been appointed Deputy Licensing Magistrate of the Licensing Court for the Licensing District of Bathurst, and acting Visiting Justice to the Gaol at Bathurst, N.S.W., during the absence of C. K. Smith, Esq., Police Magistrate.

JUVENILE SMOKERS.—Launceston, Tas., City Council prohibits young people under 13 years from smoking cigarettes in the public streets.

MILITARY INTELLIGENCE.

NEW ZEALAND.—Dr. Joseph McNaughton Christie has been appointed Medical Officer to the 2nd Battalion (West Coast) Rifle Volunteers, with the rank of Surgeon-Captain. Dr. N. McK. Grant has been appointed Surgeon-Captain in the Auckland Mounted Rifle Volunteers.

LITERARY NOTES.

WE have received a pamphlet entitled *Growing Children: Their clothes—and deformity*, by E. Noble Smith, F.R.C.S. Edin., Senior Surgeon to the City Orthopaedic Hospital, London. It contains twenty-four pages of excellent advice, and well repays perusal. It is published by Messrs. Smith, Elder and Co., and the price is sixpence.

CHANGE OF ADDRESS, ETC.

ARMSTRONG, Dr. G. W., formerly of Corryong, has succeeded to Dr. Hutton's practice at Canterbury, Vic.

BOWKER, Dr. C. S., late of Tumut, has commenced practice at Gunnedah, N.S.W.

BOYD, Dr. P. C., of Hobart, has succeeded to the practice of Dr. Gurdon, at Middle Brighton, Vic.

BRENNAN, Dr. J. MCD., has removed from Capertee to Port Broughton, S.A.

BROWNBIGG, Dr. H. W., has commenced practice at Muttaborra, Q.

DUIGAN, Dr. C. B., has removed from Richmond to Carisbrook, Vic.

GOING, Dr. J. A., has removed from Sherwood to St. George, Q.

JOEL, Dr. S., late of Parkville, Vic., has commenced practice at Bunbury, W.A.

KESTEVEN, Dr. L., has removed from Sydney to Gulgong, N.S.W.

LEARY, Dr., has left Burnie, Tas., for Melbourne.

MORRIS, Dr. A. B., has removed from Deloraine to St. Helens, Tas.

MORRISON, Dr. DAVID, has removed from Adelaide to Swansea, Tas.

OWENS, Dr. E. M., late of Brisbane, has commenced practice at Burnie, Tas.

RIGBY, Dr. W. H., has settled at Goodooga, N.S.W.

STEWART, Dr. JOHN, formerly of Walhalla, Vic., has succeeded to Dr. Pawlett's practice at Rodalla, N.S.W.

THOMAS, Dr. F. M., late of Melbourne, has started practice at Emu Bay, Tas.

VIOLETTE, Dr. W. B., has removed from Parramatta to Coast Hospital, Little Bay, near Sydney, N.S.W.

WATSON, Dr. G. G., has commenced practice in Burnie, Tas., as assistant to Dr. Rooke.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced :

Angove, Dr. W. T., to be Officer of Health for Tea Tree Gully, S.A.

Darbyshire, Dr. D. E., to act as Resident Medical Officer and Public Vaccinator at York, W.A.

Donaldson, J. B., L.R.C.P., &c., to be Officer of Health for the Shire of Hampden, Parishes of Carranballao South Barriyalcock, and Skipton.

Duigan, C. B., L.R.C.P., &c., to be Officer of Health for the Borough of Carisbrook, vice Dr. W. C. MacKnight, resigned.

Forster, A. E. B., to be Officer of Health for the Shire of Lancefield, Vic., vice Dr. A. G. Keogh, resigned.

Gregoreon, Dr. W. J., to be Officer of Health for West Torrens, S.A.

Harbison, J. W., M.B., &c., to be Acting Officer of Health and Public Vaccinator at Numurkah, Vic., during the absence of Dr. J. A. Harbison, on leave.

Mayne, J., M.R.C.S. Eng., &c., to be Medical Superintendent of the Brisbane Hospital.

Pring, A., L.R.C.P. Lond., to be Medical Officer at Taroom, Q.

Ramsay, J. E., M.B. Lond., &c., to be Health Officer for Lennonville, W.

South, H. M.B., to be Acting Officer of Health for City of South Melbourne during the absence of Dr. W. P. Dalish, on leave.

Thomas, G. H. W., M.R.C.S. Eng., to be Medical Officer at Marceba, Q.

MEDICAL RESIGNATIONS.

The following Medical Resignations are announced :

Keogh, A. G., M.B., as Officer of Health for Shire of Lancefield, Vic.

MacKnight, W. C., M.B. Edin., &c., as Officer of Health for the Borough of Carisbrook, Vic.

REVIEW.

NOTES ON SURGERY FOR NURSES. By Joseph Bell, M.D., F.R.C.S., Edin., Consulting Surgeon to the Royal Infirmary, and to the Royal Edinburgh Hospital for Sick Children. Fifth edition, thoroughly revised. Edinburgh: Oliver and Boyd, 1899. Price 2s. 6d.

This work, the fourth edition of which we reviewed in our columns about three years ago, has been favourably received by the nursing profession. The author has added an appendix treating of the important and interesting questions raised as to the relation of the trained nurse to the profession and the public.

We must repeat the regret that the author still persists in the statement that dirt includes *everything that has a smell*.

On the whole, the work is well up to date, and should prove useful to those for whom it was written.

(See also page 212).

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas have been duly registered as legally qualified medical practitioners by the respective boards:—

TASMANIA.

Ick, Edwin Theophilus Jesse, M.B. Melb. 1898.

Morrison, David, M.B., B.S. Univ. Lond. 1894.

Thomas, Frederick Michael, M.B. Melb. 1898.

QUEENSLAND.

Dods, Joseph Espie, M.B., Bacc. Surg. 1897 Univ. Edin., Dip. State Med. Dubl. 1898.

Elliot, Nicholas Phillips, Mem. R. Coll. Surg. Eng. 1890, Lic. R. Coll. Phys. Edin. 1888.

Waugh, Henry George, M.B., Mast. Surg. 1896 Univ. Edin.

Republished.

Brownrigg, Herbert Watson, Lic. Soc. Apoth. Irel. 1879, Lic., Lic. Midwif. 1881, K.Q. Coll. Phys. Irel. (Registered 1883).

WESTERN AUSTRALIA.

Darbyshire, Douglas Edward, M.B. Ch.B. Victoria University 1895, M.R.C.S. Eng., L.R.C.P. Lond. 1898.

Joel, Simon, M.B., Ch.B. Melb. 1897.

NEW SOUTH WALES.

Dobbyn, George Henry Sawtell, M.D. Univ. Pennsylvania, U.S.A., 1893.

Fox, Robert Algernon, M.B., Mast. Surg. 1893 Univ. Edin.

MacKenzie, John, M.B. Univ. Sydney 1899.

Spark, Sydney Walter, Lic. Soc. Apoth. Lond. 1874, Lic. R. Coll. Phys. Edin. 1875, Lic. R. Coll. Surg. Edin. 1875.

Windeyer, John Cadell, M.B. Univ. Sydney 1899.

NEW ZEALAND.

O'Neil, Eugene Joseph, M.B., B.S. Univ. N.Z.

Russell, Bartholomew Taylor, L.R.C.S.I., L.K.Q.C.P.I.

Sutherland, William, M.B., B.S. Univ. N.Z.

MacKnight, William Crawford, M.B., C.M. Edin.

SOUTH AUSTRALIA.

Butler, Frederick Stanley, M.B. Melb., December 23rd, 1898.

Chenery, Arthur, M.R.C.S. Eng., October 31st, 1897; L.R.C.P. Lond. October 28th, 1897.

Martelcke, Martin, Staats Exam., Saxony, July 6th, 1894.

McSweeney, Michael Stanislaus, M.B. Melb., December 23rd, 1898.

VICTORIA.

Charlton, Alfred, M.B. et Ch.M. Glas. 1896.

Ponder, Charles Frederick, M.B. et Ch.M. Edin. 1892.

BIRTH AND DEATH.

BIRTH.

BUCKNELL.—On the 8th April, at Grosvenor Villa, Kogarah N.S.W., the wife of Dr. Leslie F. Bucknell, of a daughter.

DEATH.

MCBURNIE.—On the 30th April, on board R.M.S. Moana, Robert McBurnie, M.D., late of Mackay, Queensland; buried at Samoa.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

THE IMMEDIATE AND ULTIMATE TREATMENT OF THE INEBRIATE.

By F. NORTON MANNING, M.D., SYDNEY.

READ AT THE NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION, ON 26TH MAY, 1899.

I OUGHT, I think, to commence this communication with an apology for inviting your attention to a subject so stale as the treatment of "the inebriate." For nearly forty years this "interesting invalid" has been under consideration, and the literature which has grown up around and about him is something astonishing in its variety and volume. Like the poor in Scripture, he is always with us, and although recent legislation in England and in Queensland, and the Bill now before the Parliament of this colony are in great measure the outcome of what has been written and said, and are steps in the right direction, I am quite sure that the last word has not yet been spoken.

I have no intention of attempting any scientific definition of inebriety, nor of differentiating the inebriate, as some do, from the habitual drunkard. I know of no hard and fast line separating the so-called inebriate from the so-called habitual drunkard. A distinction at one time much insisted on was that the inebriate, to put it briefly, repented of his sins and had periods of sorrow and sobriety, whilst the habitual drunkard had neither, but even the habitual drunkard is sorry and repentant when he is physically unstrung and is suffering from the collapse which cometh in the morning. I notice with satisfaction that the recent Act passed in England has for its short title "The Inebriates Act of 1898," that the Queensland Act uses the word "inebriate" only, and that the Bill lately passed by the Legislative Council of this colony—and which has yet to come before the Legislative Assembly—is "for the care, control, and treatment of inebriety." "Inebriate" then let it be, and in this paper I shall class as inebriate all who suffer physically, morally, or mentally from alcohol habitually taken in excess.

I will first address myself, shortly, to what may be called the immediate treatment of the inebriate: inebriety in its acute conditions, *acute alcoholism*, *delirium tremens*, *mania a potu*, and the stages a little short of, but leading up to these.

First, I have no hesitation in strongly advising the immediate and total withdrawal of all alcoholic stimulant, and under medical care there is, I believe, no danger in this course, which is infinitely preferable to a gradual reduction or to any temporising with the question. Further, if the patient is under proper care in the shape of attendants and nurses, or in some hospital or institution, it is much better to let him know that alcohol in any form is forbidden. There will be a bad few hours or a bad few days as the case may be. The patient will feel the tortures of those that go down into the pit, and, in some cases, may make it so unpleasant for all about him by his language and conduct that they will be under the impression that they are on the road thither also; but this condition will only last a short time, and if any dangerous depression supervenes, or any other condition indicating the necessity for stimulants is apparent, it is easy enough to administer these in the form of cardiac or other tonics, or in the carminative tinctures of the Pharmacopœia. As soon as the patient understands that he can get no more liquor this question is at an end, and a desire often arises to take medicine and food to supply its place.

The cutting off of liquor gradually has a specious sound, but is open to the following disadvantages. There is:—

- 1st.—A protraction of the mental and physical distress
- 2nd.—A strain and anxiety in waiting for the next dose, and a dissatisfaction as to the relief afforded and the stimulation desired which keeps up irritation and craving and lends itself to the patient's cunning and determination to get further supplies, where possible.
- 3rd.—The aversion to food which exists in almost all these cases, and almost always lasts until the alcohol is discontinued, is kept up; and
- 4th.—The usual effect of drugs is interfered with, and there is uncertainty as to their action.

Turning to the question of drugs, I may recall to your remembrance that in years gone by relief was sought in opium, its compounds and derivatives. Then henbane had its day and large doses of the tincture were vaunted as a specific. Then came the days of the newer chemistry, and chloral for a time held to be a sovereign remedy. Chloral alone was, however, soon found practically useless (especially in

extreme cases) except in full doses, and as it is an intrinsic cardiac poison, besides lowering blood pressure, it was soon found to be too dangerous a drug for ordinary use. Several deaths occurred under its influence, and some practitioners who escaped fatal accidents have had some bad half hours by the bedsides of their patients.

In smaller doses, especially if continued, it has been found (though it produced sleep) to set up a condition of nervous irritability with tremor and fibrillar twitchings of muscles, and mental and physical distress, which in some cases seemed to aggravate, and in others certainly complicated, the condition for which the patient came under treatment.

Given alone then, it often falls short in therapeutic action or aggravates the distress, or when given in full or heroic doses is neither justifiable nor safe. In combination with the bromides, and in moderate doses, it has, however, been found much more satisfactory; its hypnotic action being useful, whilst the bromides act as more directly sedative and calmative.

The bromides are now usually regarded as the mainstay in the treatment of inebriety in its acute stages, and I may say at once that I have never seen anything to make me prefer the sodium or ammonium salt to the potassium which is generally used. The bromides exercise the generally calmative effect which is necessary; they produce peripheral sedation and reduce the irritability of the muscular system; they ward off the tendency to epileptiform convulsions which are a not infrequent complication in alcoholic cases; they stay the frequent vomiting which is often a distressing symptom, and interferes with taking the necessary amount of food; and finally, they prevent the general pruritis which is occasionally present in alcoholic cases treated otherwise.

The question remains as to the dosage. To put the matter briefly, I would advise that the dose of bromide of potassium should not be too small and the dose of chloral hydrate not too large. From one drachm to two drachms of the bromide combined with from fifteen to thirty grains of chloral every four or five hours until good sleep results is advisable, and after this the dose may be repeated less frequently. Dr. Branthwaite, who has for many years been in charge of the Dalrymple Home for Inebriates at Rickmansworth, in England, and who has been recently selected by the English Government as the Inspector of Inebriate Retreats under the new Act, has a large experience in these cases, and recommends one and a-half

drachms of bromide and twenty grains of chloral. The late Medical Officer of the Reception House gave two drachms of bromide and half a drachm of chloral, and Dr. Paton, the present Medical Officer, gives one drachm of bromide and half a drachm of chloral. There is little danger of depression from a few large doses of the bromide, and it is not often necessary to give more than a few large doses in these cases, or to continue the active treatment beyond forty-eight hours. It is always advisable to watch the urine, and to administer diuretics where it is scanty and loaded, as is not infrequently the case.

The quantity of stimulants given at the Reception House has at no time been other than very small, and they are now only given in occasional cases and when it becomes necessary to find out the patient's favourite liquor and to give a flavouring of this with the medicine so as to induce him to take it.

In the year 1882 an amendment of the Lunacy Act was passed which permitted the magistrates to send, under remand, to the Reception House cases of acute alcoholism for care and treatment. During the sixteen years which have since elapsed, about 3,000 cases have been received and treated in the manner above indicated. A very large proportion have been extremely bad cases, such as could not without great difficulty have been treated in private houses. The mortality has been about one per cent. which, considering that the cases dealt with have included the drunken derelicts of a large city, and that all have been so marked as to necessitate the interference of the police, is, I think, a satisfactory result.

I fear I have not been able to tell you anything new, but I have in a manner summarised the experience of some thirty years, and this is not, perhaps, without interest.

Turning to the second part of my subject—The Ultimate Treatment of the Inebriate—I will first ask your assent to the proposition that the treatment of the confirmed inebriate has thus far been very largely a failure. There have been isolated cases of success under almost all the forms of treatment adopted, whether this treatment has consisted in confinement in an Hospital for the Insane, a voluntary seclusion in a so-called "inebriate home," hypnotic suggestion, or the "cures" promoted by English or foreign charlatans or by weak-kneed, if well-intentioned, religionists, but the great mass of the inebriates are none the better for the care, the money, and the pains expended on them, and pursue their downward course with only temporary checks.

Thirty years ago voluntary retreats on a palatial scale, and with the most luxurious fittings and surroundings, were started in America and elsewhere, sometimes by the aid of State subsidies, and sometimes entirely by private effort, but many of these are now abandoned or have become hospitals or licensed houses for the treatment of insanity. Some still struggle on, but even the best of these, like the Dalrymple Home at Rickmansworth, established by and still kept going in connection with the Society for the Study of Inebriety, are not either a financial or a distinct medical success. Happily, in America at all events, institutions have, during the last six or seven years, been established, under Acts compelling the detention of the inebriate, on quite a different basis and with quite other surroundings, and of one of these I shall have a few words to say later on. Hypnotism, though it has reckoned some successes, has also to record many failures, and does not appear as yet to be carried out on a scientific basis or to be advancing in popular estimation. The various "cures" have "had their day," though they have not yet "ceased to be."

The Hospital for the Insane has been, perhaps, on the whole, most successful, and is still resorted to in extreme cases when the symptoms justify the signature of lunacy certificates. It acts, in some cases, as a good moral shock, it brings up the patient "with a round turn," and makes him realise for the first time his position and his prospects, and further, it carries with it compulsory confinement (though for periods all too limited) under a somewhat rigid if not Spartan *regime*, and, what is equally important, it carries with it work. But it has been long since recognised that an institution for the insane is not a fit place for the average inebriate, and that he himself, with his tendency to lying and deceit and his general moral debasement, is a disturbing, and a corrupting, and an unwelcome element in every institution for the insane.

It has happily been recognised also that long periods of compulsory sequestration are the essential of all successful treatment, and recent legislation is all tending in this direction. Unfortunately, it is not yet recognised that this sequestration must be carried out in a fit place under proper conditions, and that one of these conditions must be active bodily work. The Queensland Act, to which little exception can be taken, except that the period of detention is, if anything too short, was passed late in 1896, and is probably the most advanced, as it is one of the most recent attempts at

legislation on this subject, but it is, I fear, going to be, if not a dead letter, at all events a failure. It provides for the voluntary admission and also for the compulsory admission of inebriates into recognised retreats, or institutions and the compulsory cases are of two kinds: those whose admission is sought by friends who produce medical certificates to the effect that curative treatment in an institution or retreat is necessary, and secondly, those against whom three previous convictions, at least, are recorded for offences mentioned under the 84th Section of the Licensing Act of the colony. The period of detention is for a period not exceeding twelve months, and there is power of renewal.

The Act provides for Regulations, but none have yet been made except to fix a maintenance rate, and beyond this the only step taken under the Act appears to have been that a ward in the Brisbane Hospital—of all places in the world—has been set apart as a place of detention under the Act. In this there is no opportunity for active exercise or for work, even if the patients are so disposed, the nurses trained for other duties, are altogether out of their element in dealing with such cases, and the patients find the words "loaf" and "luxury" writ large all over the place.

The Benevolent Asylum at Dunwich has also been proclaimed a Home under the Act, and is only one degree less suitable than the Brisbane Hospital.

The English Act passed in 1898 deals first and mainly with "criminal inebriates," and secondly makes some amendments in the Acts of 1879 and 1888, which deal altogether with voluntary admissions to retreats. The English legislature, always slow to adopt new views, has not yet gone the length of providing for the compulsory sequestration of the inebriate so long as he does not bring himself within the clutches of the law and can be called a criminal. The detention of the inebriate under voluntary application, though it may have done some good, is on the whole a failure, and the new English Act is chiefly interesting in its relation to the inebriate who has come within the clutches of the law—the "criminal inebriate," as he is termed in the Act. At the same time it seems much to be regretted that what is regarded by many as a great social and medical experiment is to be made in the first place with a class not so likely to respond to treatment as the ordinary inebriate. The English Act provides that when any one is convicted on an indictment punishable with imprisonment or penal servitude, and the Court is satisfied that the crime was wholly or partly

due to drink, or the prisoner is found to be an habitual drunkard, he may, either in addition to or in substitution of the sentence, be detained in an inebriate reformatory for a term not exceeding three years. Other sections provide, first, that the prisoner need not be tried for the offence with which he is charged, but proceeded against for habitual drunkenness, and, second, that after three previous convictions within the preceding twelve months under the Licensing Act, Towns Police Act, or other similar Acts for offences specified, the prisoner may be dealt with as above mentioned.

The English executive, by the aid of a departmental committee, has prepared and published an excellent series of regulations under the Act, which prescribe carefully the system of management, the food, recreation, and, what is most important of all, the employment of the inmates, and also the punishments for breaches of discipline or refusal to work. Work is made compulsory for at least six hours a day, and optional for a longer time; and the proceeds of optional work are devoted to the needs of the inmate or his family. In addition there is physical drill daily.

Now all this is on right lines, but, unfortunately, the Home Secretary has shrunk (at all events for the time) from the establishment of a State Inebriate Reformatory for which the Act provides, and which is a necessary concomitant of its provisions, on the ground (I quote the official words) that "Though various prisons have been examined and reported on as more or less suitable for the purpose, he had not been able to obtain such a forecast of the number of convictions as would warrant him in applying to the Treasury for the necessary funds." The proposal is, therefore, to leave the matter in the hands of local councils, philanthropists, or private speculators to establish licensed reformatories, to which the Government propose to pay liberally for the maintenance of the inmates committed.

This is very much to be regretted, as to make the Act a success, a State institution, specially designed for the object in view, and with a sufficient area of land for farm and other purposes, is a necessity to serve as a model. Such institution should be on a sufficiently large scale for efficient and economical management and for proper classification, and it is only in such a State institution, or in one under the larger county councils, that the needful rigid discipline and the other accessories of treatment can be expected. I say "rigid discipline" advisedly; this, with compulsory work and physical drill, are essential,

and they should of course be combined with a suitable dietary and every other restorative influence, moral, religious, and recreative, which can be devised. Without these, mere detention and abstinence from alcohol are useless. The inmate must *work* out his own salvation, and, if he is to be benefitted by his detention, he must come out a new man physically as well as morally. It is of no use playing with this matter, and pampering and petting this "erring brother." Too much has been done in this direction already.

I commend to your perusal an article in the October number for 1898 of the *Journal of Mental Science* on the "Mismanagement of Drunkards." It is a most breezy, outspoken deliverance on this subject, and shows that the tide is turning, or has turned, and that a great deal of the sentimental nonsense which has been spoken and the mistaken and mischievous views which have been held as to the care and treatment of the inebriate are coming to an end. Without going the whole way with the writer of this article, I agree thoroughly with much that he says. I would hold that inebriety is mostly vicious and reprehensible, and must be met by what have not inaptly been designated "Calvinistic" methods; that we must, in dealing with the inebriate, do away with the flabbiness and sentimentalism which have been shown to be unwarrantable, mischievous and dangerous, and mete out to him compulsory detention for long periods with a rigorous moral and physical discipline which will make a new man of him.

Our teaching, like our practice, has heretofore been grievously wrong. We have made too much of hereditary tendencies, and held these to be an excuse. We have spoken of alcoholic cravings as if they were pitiable, and were ingrained and unconquerable weaknesses. The weakness of will, the selfish desires, the dishonesty, lying, and moral perversion we have held to be venial, and we have taught that the inebriate was to be shielded from the consequences of his words and deeds. All this should cease. We must hold him to be responsible like other men, or we must shut him up and treat him judiciously until he becomes so.

I had intended to criticise in some particulars the Bill introduced into the Parliament of this colony by Dr. Creed, but I have already occupied more time than I purposed or am justified in doing.

I will conclude by expressing a hope that some such Bill may soon become law in this colony, but I fear that unless the Executive is prepared to deal with the matter in a liberal

spirit, and to establish a State inebriate institution on right lines under stringent regulations as to dietary, compulsory work, physical drill, and classification of inmates, such Act will effect but little good, or be of but little benefit either to the inebriate or the public. In such an institution wards or detached cottages could be set apart for those able to pay for their maintenance, in which their surroundings might be at all events comfortable, and in a manner compatible with their education and condition of life, but in which occupation and discipline should still be essential conditions.

The State of Massachusetts, always in the van of social progress, has now an hospital to which inebriates are committed for terms not exceeding two years. In connection with it is a large farm, of which ninety-six acres are under cultivation, and workshops in which various trades are carried on, and from which, by the sale of brooms alone, £1,500 was realised in 1898. In this hospital occupation and exercise under medical supervision are the essentials, and it is found that under physical training—which is carried on in regular classes—the patients increase in weight and in chest capacity, whilst the ultimate effects of the treatment are decidedly encouraging. It is on some such lines that the question should be dealt with in this colony.

AN INDIARUBBER TEAT IN A CHILD'S BOWELS FOR FOUR WEEKS AND FOUR DAYS.

By G. L. LAWSON, M.R.C.P. EDIN., D.P.H., &c., NORTH SYDNEY.

ABOUT midday on April 27th G. R., a healthy, well-nourished baby, six months old, was playing with a comfort. His mother left the room for a few seconds. When she returned she noticed the indiarubber teat had disappeared from the bone part of the comfort. A careful search was made, but the teat was not found. The parents concluded the baby must have swallowed it.

I was consulted about an hour-and-a-half after the occurrence. There were no symptoms.

The child had been fed on the breast, also partly on cow's milk. He was in good health, and the bowels were regular.

I advised that nothing should be done, so that the bowels might act regularly as hitherto, and if any symptoms supervened that advice be sought at once without delay.

On Sunday, May 28th, the child strained very much at stool, and seemed in pain. The

straining continued slightly, more or less, at intervals until May 29th, when the pain and straining seemed more severe. On examination something was seen lodged in the anus, and when removed was found to be the teat. It was covered with clayey feces. The indiarubber was firm and elastic, a yellow-brown colour on the surface, and darker brown in the substance of the indiarubber. The whole mass had an oval shape, was two inches long by one inch in diameter at the thickest part.

The foreign body was in the bowels four weeks and four days; during this time the bowels acted regularly. There were no signs of any irritation until the last twenty-four hours.

AN OUTBREAK OF DERMATITIS EXFOLIATIVA NEONATORUM.

By WALTER SPENCER, M.D., HON. PHYSICIAN TO THE SYDNEY RESCUE WORK SOCIETY.

READ BEFORE THE ROYAL SOCIETY OF NEW SOUTH WALES, MEDICAL SECTION, MAY 19, 1899.

UNDER the heading "Pityriasis Rubra" current text-books of dermatology notice an epidemic among infants described by Ritter of Prag, which appears to be unknown in the British Isles. It sometimes simulated pemphigus foliaceus, was accompanied by slight constitutional disturbance, but proved fatal to 50 per cent. Sporadic cases have occurred elsewhere. Two were reported in the *International Journal of the Medical Sciences* in January, 1888.

I have been unable to see Ritter's original narrative, which appeared in the *Vierteljahrsschrift für Dermatologie*, 1879, but indications are not wanting that it materially differs from that which I have the honour to report to you.

In McCall Anderson's treatise, Savill mentions epidemics among adults, and describes the disease as a dermatitis sometimes attended by the formation of vesicles, always resulting in desquamation of cuticle and lasting seven or eight weeks. Usually commencing as a bright red papular rash, often circularly arranged, it was followed in nearly all cases by some thickening of skin. Two varieties were noticed, the moist and the dry; the former might be mistaken for eczema, the latter for pityriasis rubra. Relapses occurred in 25 per cent. In severe cases the hair and nails shared in the exfoliation. Among complications were diarrhoea, vomiting and furunculosis.

Behrend considers it to be identical with pemphigus foliaceus but Soltmann, in an instructive summary of the subject published in *Archives*

de *Medecine et de Chirurgie Infantiles* (Paris, Feb., 1899), from which I have gleaned much information, points out differences; for instance, that in pemphigus foliaceus the lost epidermis is not reproduced, whereas in dermatitis exfoliativa it becomes entirely regenerated. Ritter holds that they differ essentially, that pemphigus foliaceus in infants is very rare, runs a chronic course and is invariably fatal, whereas dermatitis exfoliativa spares 50 per cent.

This epidemic was an infectious dermatitis of sudden onset without premonitory symptoms, showing special affinity for infants under three weeks old but avoiding adults, was usually unattended by constitutional disturbance and presented a capriciously polymorphous eruption which underwent a rapid evolution until it became lost in exfoliation more or less extensive. In cachectic subjects its evolution was arrested, as it proved rapidly fatal. Its longest duration was eight weeks.

Etiology.—At various times by various observers various micro-organisms have been accused of being the proximate cause of pemphigus neonatorum, but Soltmann does not believe in the existence of any specific pathogenic agent, rather he opines that different pathogenic microbes may, carried by the blood, accidentally determine an infection in the newly born, and that consequently the course of isolated cases or of epidemics may prove to be indifferently benignant or malign. Savill attributes dermatitis exfoliativa to a specific microbe, a characteristic diplo-coccus, of which it is difficult to obtain pure culture and then only at certain stages of the malady.

Previous outbreaks of dermatitis exfoliativa and of pemphigus among infants have occurred in lying-in and foundling hospitals where, if there be a contagion, it is soon communicated from bed to bed, or by nursing contact.

Ritter maintained that dermatitis exfoliativa neonatorum is the partial expression of a disease which originates in puerperal infection. Malcolm Morris remarks that septic infection is a factor in pemphigus foliaceus.—Dubois' notes of pemphigus neonatorum that vesicles might exist and even burst during intra-uterine life, but that the infant would soon die. Here, case 7 was born with erythema, case 20 with papules. Both recovered.

Bullous syphilides on the newly born have been observed. A case of another kind is known to me where an infant displaying well-marked vesicles of variola was born to a vaccinated mother, who had nursed a smallpox patient towards the end of her period of gestation.

In this epidemic the presence of measles and rubella among a number of inmates must be noted. Eighteen had been attacked in one day, as well as others during the previous month. Case 1 appeared on the tenth day of measles. The mother of case 4 had measles during the puerperium, and cases of rubella were under treatment in other parts of the building.

Cases 7 and 20 were born with the disease, therefore it must be admitted that dermatitis exfoliativa neonatorum may be transmitted through puerperal infection; although it was not the main factor of this epidemic because case 1, aged $3\frac{1}{2}$ years, puts it out of the question.

Pemphigus neonatorum is admittedly contagious. According to Soltmann's observations at the Children's Hospital at Leipzig, 1882, it was propagated from bed to bed. Other outbreaks appear to have spread by contact. In the St. Louis Hospital, Paris, in 1877, forty infants, aged from two to six days, succumbed, out of sixty-nine attacked.

The dermatitis exfoliativa neonatorum of Ritter is said to be non-contagious and independent of local infection.

I did not recognise the nature of this disease until I had seen cases 3 and 4. At that time, No. 1 being dead, I isolated case 2, and arranged the transfer of 3 and 4 to the Little Bay Hospital. Eight days afterwards cases 5 and 6 occurred, followed by case 7 on November 12th, and by 8 and 9 on November 30th.

Finding that less radical measures failed to check the epidemic, at the end of November I segregated the patients with their nurses, closed both lying-in wards and transferred that department to a spacious room on the first floor. All articles in use, together with the nurses and their belongings, the furniture, walls and ceilings of the infected wards were given over to rigorous disinfection, as though after puerperal septicaemia, during fourteen days, at the end of which term occupation was resumed. As a result, the epidemic ceased for 38 days—until January 8th, 1899, when cases 10 to 15 succeeded each other with startling rapidity. On January 14th and at end of February the wards were again closed and same measures carried out, without avail until it was discovered that one of the hairbrushes in use for infants had eluded our vigilance. This element of contagion being eliminated, renewed efforts at isolation with disinfection were crowned with success.

In contrast, therefore, to the experience of Ritter's disease, I find that this epidemic was endemic and contagious to new-born infants;

with a proviso, echoing the words of Savill, that it took place "under conditions which are not yet understood, and at a short infective distance, possibly implying actual contact."

An account of the *locale* may be desirable. The lying-in wards are on the top floor of a lofty building in Newtown called the "Home of Hope," for the reception of all classes of fallen women, from the betrayed and cast-off daughters of the wealthy to the common walkers of the streets. Two wards of seven beds inter-communicate through a corridor with double doors and, together with isolation and convalescent rooms, are shut off from the rest of the building by two other corridors with double doors. A staff of trained nurses is maintained (under the supervision of two ladies who hold certificates of the London Obstetrical Society), whose resourceful assiduity and single-minded devotion have seemed to me to be above praise. They attend also in the homes of the necessitous throughout the neighbouring districts. The value of the institution also to poor married women in their extremity is evinced by the narrative of cases 11 and 12.

The place is well ventilated, the inmates well nourished, and the standard of general health favourable in comparison with that of similar institutions.

Of the five deaths recorded, one inherited syphilis and had not recovered from a severe attack of measles; one was born puny and feeble whilst the mother was incubating measles; two were prematurely born at seven months; and the last, aged 10 days—born to an ailing mother—was already wasting away. The average of 20 per cent., instead of the 50 per cent. of former outbreaks, speaks for itself as to the *locale*, its hygienic conditions, and the intelligent care bestowed by trained nurses upon the newly-born.

Symptoms and Course.—A prodromal stage described by Ritter as attended by abnormal dryness of skin with branny desquamation would, in this epidemic, be better recognised as sign of onset, but in many of the cases it did not occur.

Eruption usually began upon the trunk, and extended to both sides without any special tendency to symmetry, but most affected extensor surfaces. The hairy scalp seldom showed any type but pale macules or papules, which I never observed to exfoliate in laminae. A few cases had sore mouths, but eruption on the buccal mucosa was transient, refusal to suck lasting only for a day or two.

Most of those attacked were sound and healthy. The capricious disregard of type in

the initial eruption, whether of erythema, macule, papule, vesicle, bulla, or pustule, was uninfluenced by the previous condition of mother or child, except in two cachectic cases, which developed a fatal pemphigoid.

The initial eruption arose upon an otherwise clear skin, and in a majority of cases was of oval translucent bullae, each .8 to 1.5 c.m. in long diameter, sometimes surrounded by a pink areola. Sometimes these collapsed and healed like an artificial blister, sometimes the areola extended into erythema and exfoliated, sometimes leaving a healthy ulcer on the spot; sometimes the bullae became pustular and gave rise to an area of erythema with exfoliation. In cases 1 and 23 they looked somewhat flaccid, and had narrow dusky areolae, those of case 1 averaging 1.5 c.m., that of case 23 measuring over 3 c.m. No second crops occurred.

Erythema, apart from its occurrence as an initial lesion appeared and disappeared in patches during the course of most cases. It tended to extension and coalescence, bore on its surface at different periods small vesicles or pustules, and usually produced desquamation. When on the decline it ceased to spread, became paler, and gradually faded away.

Macules remained sometimes unaltered until they disappeared. They sometimes merged into adjacent patches of erythema. Sometimes they bore a minute central vesicle which occasionally became pustular.

Papules chiefly affected the region of the hairy scalp, where they remained pale. Elsewhere they were pinkish, sometimes became vesicular and pustular, and shared in exfoliation. Case 20 resembled lichen pilaris.

Vesicles occurred in some cases. Only in case 24 were they the initial sign.

Pustules were developed from vesicles or from bullae, except in case 14, which was born with a large crop, each averaging .3 m.m. in diameter.

Desquamation never extended over the whole surface of the patient. From erythema, it usually appeared first as furfur, which might be succeeded by laminae. Both varieties might be visible on the same patient. Laminae were, in some cases, shed daily in quantity such as to excite surprise at the reproductive power. In the stage which immediately preceded desquamation in flakes, the patients' faces were hardly recognisable as human. They resembled rather mummies with features of shrivelled wrinkled parchment. Exfoliation of the moist variety, left a sanguinolent substratum, looking (as the Medical Officer to the Coast Hospital described to me cases 3 and 4) "all over blood,

especially as to face." Large exfoliations were accompanied by a slight degree of tumefaction around and beneath. The largest area to peel at once was the dorso-lumbar. Denuded surfaces sometimes appeared dry, at others moist, and in some instances disfigured by small blood clots, with rimæ and linear crusts radiating from the commissures. In all varieties of eruption, the decline was manifested by gradual subsidence of desquamation.

Owing to the vigorous peripheral circulation of infancy, hair and nails were not affected. Neither were palms or soles, except in cases of inherited syphilis, where also the eruption was mere dusky and tended to crescentic arrangement. A faint, sickly, but not foetid odour emanated from the patients. Desquamation left a transient mottled discolouration, but no cicatrices nor thickening behind it. Complication and relapse occurred in No. 25 (syphilitic) only. No evidence of itching was observed. Except in one fatal case, temperature did not exceed 101°.

In view of the foregoing details and of the appended table it will only be necessary to have a summary of each case, with occasional description of striking morbid appearances by way of illustration.

CASE I.—The mother was syphilitic, somewhat deficient in intelligence. She had been an inmate for three years. No further family history could be ascertained.

October 1st, E. K., female, aged 3½ years, anæmic and debilitated, having been severely attacked with measles ten days before, showed translucent oval bullæ averaging 1.5 c.m. in long diameter near the mouth and in the superciliary region; they had a narrow pink areola. The rest of the skin was normal except for brownish stains left by the measles spots, upon whose surface some of the bullæ were situated. I saw the child next day at about 10 a.m. Fresh bullæ were present round the flexures of elbow and thigh on the left side and on the back of thorax. These together with the bullæ of the previous day were sanious flaccid and their areolæ very dark. The complexion had changed to an earthy pallor. Pulse, 130; Temperature 99°. death occurred without warning at 1 p.m.

On examination, the body appeared not to be emaciated. Many of the bullæ had sloughed and undergone shreddy exfoliation of thin skin which extended to their surrounding; their subjacent tissue was in condition of almost black necrosis without healthy pus but without fætor. The hands and feet were unaffected.

Duration, two days. Death certificate, pemphigus foliaceus.

CASE II.—The mother was a healthy Maori primipara, said to have had transient eruption, probably urticarial, some weeks before a normal labour. Quite healthy since.

October 14th.—A. S., female, aged 10 days; dusky, brick-red erythematous patches on neck and loins. On the third day they presented a few bullæ, and within a week commenced to desquamate in laminæ, shedding large flakes of epidermis from great part of trunk and limbs. This continued for 14 days. Palms and soles spared. Duration, 21 days. Recovery.

CASE III.—The mother was a healthy primipara, who has remained healthy.

October 25th.—G. M., male, aged 10 days; showed slightly-raised pink macules round the mouth. In a few hours others appeared on face and neck. On the third day branny desquamation occurred on all the affected area from both sound and unsound skin. This was followed by exfoliation in laminæ. The denuded surface looked very red and weeping like eczema rubrum, rimæ and narrow crusts radiated from the buccal and palpebral commissures. Papules were found upon the scalp. On the fourth day the buttocks became erythematous. On the sixth, face, neck and buttocks resembled wrinkled parchment, grey and yellow in colour, which was peeling off in laminæ some of them 5 c.m. in length.

On November 3rd this case with No. 1, was sent to the Little Bay Hospital, whence they returned on November 19th presenting the same appearances. Flaky desquamation continued until November 25th without change of character. Palms and soles unaffected. Constitutional disturbance very slight. Duration, 35 days. Recovery.

CASE IV.—The mother was a healthy primipara. Normal labour, healthy since.

October 25th.—F. B., female, aged 10 days. Her case was in every respect a replica of case 3. Duration, 35 days. Recovery.

CASE V.—The mother was a Mulatto primipara, aged 20, healthy. Labour normal, on October 25th. Next day general anasarca with albuminuria set in. Wet packs, loin poultices, diuretin and elaterin, effected rapid improvement, and on the 29th a general measles rash appeared to explain the symptoms. She was well in 12 days, without desquamation. Healthy since.

November 2nd.—F. C., female, aged 7 days, puny and feeble, showed erythematous blushes on neck and loins, which soon spread, commenced to desquamate in flakes and so continued

and without any modification. Scalp, palms, and soles unaffected. Temperature subnormal. Asthenia and emaciation progressive. Duration, 21 days. Death.

CASE VI.—The mother, a healthy multipara, had a transverse presentation which was early detected and bimanually changed into a normal labour. Healthy since. The infant No. 5, whilst still unattacked, was taken by this mother to nourish together with her own, and the symptoms appeared in both at the same time.

November 2nd.—E. R., male, aged 7 days. Patches of erythema appeared on face and trunk. Branny desquamation ensued, which on the fourth day peeled in larger scales and flakes. Scalp, palms, and soles unaffected. No constitutional disturbance. Duration, 14 days. Recovery.

CASE VII.—The mother, a Mulatto primipara, syphilitic, had prolonged labour due to mal-presentation. Healthy since.

November 12th.—T. G., male, displayed at birth pale slightly raised pink macules and larger erythematous patches on scalp and buttocks. After two days similar eruption invaded the neck, axillæ and face.

Description at three weeks.—Plump, well developed. Complexion scarcely darker than a Caucasian. Pulse 100, respiration 18, temperature 99°. Skin of face branny, but not reddened, of neck red, moist and branny. Internal aspect of arms peeling in flakes, showing moist erythema beneath, which on right arm bore three small healing ulcers. Diffuse erythema over thorax and abdomen. Rhagades in the skin folds. Legs showing erythematous patches with a few discrete marginal macules.

Three days later.—Skin of face normal; hands, palms, legs, feet and soles showed large flakes peeling off moist red patches, small marginal macules as before. Exfoliation continued migratory for some time. Duration, 56 days. Recovery.

CASE VIII.—Mother multipara, labour normal; healthy before and since.

November 30th.—M. L., male, aged 14 days. Small bullæ without aureola appeared on forehead and around mouth; next day on neck, then in the skin folds and lastly on the face. Desquamation in the same order ensued, either branny or flaky from dry red surface.

December 16th.—Entire skin of face dusky brick-brown, exfoliating in large wrinkled parchment-like flakes.

Afterwards the scalp became wrinkled in

suboccipital region and desquamated in large branny scales. The dorsum of hands and feet peeled in flakes. Palms and soles spared. Duration, 42 days. Recovery.

CASE IX.—Mother multipara. Had acute bronchitis some weeks before a normal labour. Weak and anæmic.

November 30th.—H. B., male aged 20 days, displayed small bullæ scattered sparsely over trunk and limbs, they became purulent on the third day, eventually all burst and crusted over. The crusts were shed after a few days' leaving pink macules which remained for a fortnight, by the end of which term they had assumed a mottled appearance. Face, scalp, palms and soles unaffected. Duration 27 days. Recovery.

CASE X.—Mother primipara. Normal labour. Healthy before and since.

January 8th, 1899.—E. S., female, aged 20 days. Erythematous patches on neck, thorax and buttocks, which within five days coalesced and begun to desquamate at first in furfur and then in long shreds, which peeled first from buttocks, then from neck and lastly from thorax. Palms and soles unaffected. Duration 42 days. Recovery.

CASES XI. AND XII.—Mother, multipara, healthy. Husband in West Australia had sent money for her to join him and her passage had been taken for the next day per steamer. Exertion of preparing for the journey brought on premature labour. She was staying with friends who were in very poor circumstances and who applied to the Home for her admission, which was immediately granted. Labour was complicated, but delivery of twins was safely effected after some delay. Well on January 19th.

January 8th.—M. C.'s twins, male and female (premature at seven months), 3 days old. The female had general erythema, which next day commenced to desquamate in flakes, till most of the body resembled a continuous moist sore like a recent burn; the male had a general pustular eruption which may have been irritant, as the infant was restless and cried continually. This also desquamated in flakes. Palms and soles spared in both. Duration of each, 10 days. Deaths, two.

CASE XIII.—Mother primipara. History of subacute and chronic rheumatism, but not of syphilis. Father's history could not be ascertained. Mother healthy since.

January 9th.—W. H., male, aged 20 days. Bullæ seven m.m. long, surrounded by a narrow

red areola, appeared on palms and soles. The eruption spread over the limbs and trunk. Desquamation in flakes commenced on January 11th; the patient was sent to Prince Alfred Hospital for Dr. Bennet's observation, and returned on January 18th in the usual condition. Exfoliations and erythematous macules proceeded in the usual course was treated for syphilis. Duration, 35 days. Recovery.

CASE XIV.—Mother primipara, labour normal; healthy before and since.

January 9th.—E. E., female, aged 16 days. Numerous bullæ appeared on buttocks and abdomen, which became crusted and gave rise to flaky desquamation off weeping red surfaces. Was sent to Prince Alfred Hospital for Dr. Bennet's observation, and returned on January 18th in the same condition. Ran a course similar to Case XIII., but palms and soles were spared. Duration, 35 days. Recovery.

CASE XV.—Mother healthy primipara, labour normal; healthy before and since.

January 10th.—G. J., male, aged 5 days; weak and puny, showed several bullæ, length over one c.m., on the trunk. These became crusted, and in three days desquamation commenced. This continued, in laminae, and ran the usual course. Palms and soles spared. Duration, 21 days. Recovery.

CASE XVI.—Mother primipara, labour normal; healthy before and since.

January 18th.—E. F., male, aged 9 days. Showed several small bullæ, averaging six m.m. in long diameter, on neck and buttocks, which soon dried up without surrounding desquamation. Palms and soles spared. Duration, 3 days. Recovery.

CASE XVII.—Mother multipara. Labour normal. Healthy before and since.

January 21st.—F. F., female, aged 7 days, showed numerous bullæ on the trunk. On the third day flaky desquamation commenced and ran the usual course. Palms and soles spared. Duration 35 days. Recovery.

CASE XVIII.—Mother primipara. Labour normal. Healthy before and since.

January 21st.—B. K., female, aged 11 days, developed a slightly raised pink macular eruption on face and trunk. After two days peeling began in small flakes. New macules of small size appeared at intervals. All gave rise to surrounding desquamation of a mild character. Palms and soles spared. Duration 21 days. Recovery.

CASE XIX.—Mother multipara. An old hospital patient, rheumatic and debilitated. Labour normal. Her chronic troubles continue.

February 4th.—M. H., female, aged 7 days, displayed on abdomen a few bullæ which collapsed. Palms and soles spared. Duration three days. Recovery.

CASE XX.—Mother primipara. Labour normal. Healthy before and since.

February 16th.—W. W., male, manifested at birth small pink papules over the whole body. The buccal mucosa bore some dusky macules, and suckling was impeded. The papulus soon became acuminate with hard apices resembling lichen pilaris. Branny desquamation ensued. Palms and soles spared. Duration, seven days. Recovery.

CASE XXI.—Mother primipara, debilitated by chronic bronchitis. Labour normal. On third day of the puerperium she was attacked with phlegmasia alba dolens. In a few weeks, when she could be removed with safety, pressure for room necessitated her transfer to Little Bay Hospital.

February 18th.—F. K., female, aged 27 days, showed erythematous patches on hands and face, which entered upon furfuraceous desquamation. Mouth sore.

This case went with the mother to Little Bay Hospital. No further particulars were obtained, except palms and soles unaffected. Duration, over 30 days. Recovery.

CASE XXII.—Mother multipara. Labour prolonged, with breech presentation. Healthy before and since.

February 23rd.—E. O., male, aged 12 days; showed a few large bullæ on trunk, which collapsed, dried, and desquamated in small flakes. Palms and soles not affected. Duration, six days. Recovery.

CASE XXIII.—Mother primipara, in feeble health. Contracture of left hip and thigh, causing marked lameness, had existed for years since an attack of enteric fever. Labour normal. Healthy since.

March 1st.—G. B., male, aged 10 days, puny and wasting, had small ulcers on sides of tongue and cheek. One large bulla 3 c.m. in diameter, with narrow dark areola, appeared in left axilla. This soon became very turbid, then sanious and flaccid. It exfoliated its thin epidermis, revealing dark necrosis of the deeper tissues. Sepsis evidently spread through the axillary glands. Temperature, 103°. Duration, three days. Death.

CASE XXIV.—Mother multipara, with history of syphilis, debilitated and cachectic. Normal labour. Still in poor health.

On March 1st.—H. G., male, aged 10 days, showed a discrete papular eruption on the face and scalp, with slightly raised macules on trunk and limbs. The centre of each macule displayed a minute vesicle. This case being the first to present an initial vesicle was sent for Dr. Bennet's observation on March 5th.

March 7th.—Pustular eruption over body generally, worst on forehead, cheeks, and both arms, erythema becoming vesicular and pustular on body and scalp. Lesions mainly pustular, though some are vesicular and all very small. No exfoliative appearances.

March 10th.—Vesicles and pustules more or less disappeared, but erythema in patches beginning to appear.

March 14th.—Erythema disappearing, a few spots between shoulders and back of neck on which vesicles are becoming apparent.

March 17th.—Erythema on body still present, but pustular and other eruptions disappearing.

March 18th.—Face. Small red papules, most of which have a central vesicle. Occiput small vesicles. Left mamma and both knees erythematous, slightly raised red macules on left mastoid, shoulder, arm, loin and trochanter, also on right hand and arm. On left thigh and ankle small petechiæ. Palms and soles spared. No desquamation. Duration 26 days. Recovery.

CASE XXV.—Mother multipara. Syphilitic. Labour normal, healthy since.

March 1st.—H. C., male, aged nine days, puny with dry rough skin, showed a dusky red papular eruption on front of thorax and on both arms. It tended in places to a crescentic arrangement. On the 3rd erythematous patches appeared upon the back, which afterwards desquamated in flakes. Treated internally with hydrarg with creta, the entire eruption disappeared within eight days.

March 11th.—Foetid diarrhoea, cured in three days by tannigen with bismuth.

March 17th.—Diarrhoea returned, milk undigested, convulsions. Patches of erythema again appearing. R Hydr. with creta.

March 19th.—Still diarrhoea, but erythema fading.

March 20th.—Convalescent. Duration 21 days. Recovery.

DIAGNOSIS from a single case of this disease might be most misleading. A group of several in early stages would suggest erythema multiform, Nos. 1 and 23 would suggest pemphigus foliaceus, No. 22 pemphigus. Separate casual observers of different types and stages might ascribe each to a different disease. An ardent nosologist might group the whole as "der-

matitis multiformis exfoliativa epidemica contagiosa neonatorum."

Soltmann mentions an acute epidemic contagious form of pemphigus neonatorum which is independent of constitutional tendency, and a subacute symptomatic often fatal form following on previous disease. The latter has been observed to follow varicella and vaccinia but not measles. Trousseau remarked the transformation of varicella into pemphigus in cachectic children.

Tilbury Fox is quoted by Morris to the effect that the contents of the bullæ of pemphigus neonatorum occasionally become dark and foetid, gangrenous ulceration ensuing with death in ten or twelve days. Case 1 might be regarded as a separate example of this, were it not for the occurrence of 22 and 23, which suggest a similar *materies morbi* for those which intervened. On the same day as 23, in the same ward appeared 24, the only case whose initial sign was vesicular and which had no desquamation.

Radcliffe Crocker remarks that, in the erythemata, papules or tubercles always precede the formation of bullæ. Malcolm Morris and Ritter consider bullæ in dermatitis exfoliativa neonatorum to be an adventitious lesion and that when appearing on an otherwise healthy skin they are the pathognomonic feature of pemphigus. In this epidemic, bullæ arising on a healthy skin were a frequent initial symptom, not apparently pathognomonic of pemphigus.

It is not obvious that a bulla must differ essentially in nature from a vesicle, which in several complaints arises *de novo* on a healthy skin. Greater congestion causes more effusion, the epidermis becomes detached from a larger surface and the bulla is consequently larger than the vesicle.

PROGNOSIS.—Untainted, healthy infants, well nourished and treated aseptically under careful supervision recover after a variable term of less than eight weeks, without ulterior detriment. To those with tainted heredity, constitutional dycrasia or concurrent ailment, the primary eruption is apt to prove rapidly fatal.

TREATMENT.—Locally, permanent application of lotio zinci carb. combined in the cases of minor exfoliation with lotio nig. aa, was the most satisfactory. General treatment was seldom needed, except in cases tainted with syphilis, which responded well to mercurials.

CONCLUSIONS.—We are told that former manifestations have been mistaken for eczema, pityriasis rubra and pemphigus foliaceus. This epidemic cannot be identified with either,

although it embraces features of all. Exfoliation being its commonest and most distinctive feature, the title "Dermatitis Exfoliativa" seems to be appropriate, though it is not entirely satisfactory.

It presents for the first time, in so far as I can ascertain, the apparently fortuitous appearance of erythema, macule, papule, vesicle, pustule, or bulla as initial sign, with the subsequent evolution of interchanging types together with both moist and dry erythema, in the same subject. I submit that it should not be grouped with pityriasis rubra, but that its

peculiar pathological features entitle it to be classed as a separate disease.

I had one other case (complicated with syphilis) in a private house. Five more (uncomplicated) have been reported to me from the neighbourhood. Others probably have passed unrecorded.

Dr. F. A. Bennet, Dermatologist to Prince Alfred Hospital, was good enough to visit the "Home" for the purpose of seeing some of the patients. Three typical examples of them passed a few days under his care. For his valuable advice and assistance I am much indebted.

"HOME LYING-IN HOSPITAL."

Sydney Rescue Work Society.

OUTBREAK OF

DERMATITIS EXFOLIATIVA NEONATORUM

FOLLOWING ON THE PREVALENT EPIDEMICS OF MEASLES AND RUBELLA—OCTOBER 1ST, 1898, TO MARCH 31ST, 1899.

Total Number of Infants born during the period, 48; number attacked, 25; deaths, 5.

Case.	MOTHER.				PATIENT.																		
	Previous Health.		Labor.		Sex.		Age.	Nourishment.	Health.		Initial Lesion.						Necrods.	Desqua- mation.		Duration in days.	Termi- nation.		
	Good.	Bad.	Normal.	Difficult.	Male.	Female.			Good.	Precarious.	Bulla.	Erythema.	Macula.	Papula.	Vesicle.	Pustule.		Furur.	Laminae.		Recovery.	Death.	
1	...	*1	1	...	...	1	3½ yrs.	Light Diet	...	1	1	...	...	...	...	...	1	...	1	2	...	1
2	1	...	1	...	...	1	10 days	Breast	1	...	...	1	...	...	...	...	...	1	1	21	1	...
3	1	...	1	...	...	1	10	"	1	...	...	...	1	...	...	...	...	1	1	35	1	...
4	1	...	1	...	...	1	10	"	1	...	...	...	1	...	...	...	...	1	1	35	1	...
5	1	...	1	...	...	1	7	"	...	1	...	1	...	...	...	...	...	1	1	21	...	1
6	1	...	1	...	...	1	7	"	1	...	...	1	...	...	...	...	...	1	1	14	1	...
7	...	*1	...	1	1	...	0	"	1	...	...	1	1	...	...	...	...	1	1	56	1	...
8	1	...	1	...	...	1	14	"	1	...	1	...	...	...	...	...	...	1	1	42	1	...
9	...	1	1	...	...	1	20	"	1	...	1	...	...	...	...	...	...	1	1	27	1	...
10	1	...	1	...	...	1	20	"	1	...	1	...	...	...	...	...	...	1	...	42	1	...
11	1 }	...	...	1 }	...	1	3	"	By hand	...	1	...	1	...	...	...	...	1	...	10	...	1
12		1	1	3	"	"	...	1	1	...	1	10	...	1
13	1	...	1	...	...	1	20	"	1	...	1	...	...	...	...	...	...	1	...	35	1	...
14	1	...	1	...	...	1	16	"	Breast	1	...	1	...	...	...	...	...	1	...	35	1	...
15	1	...	1	...	...	1	5	"	"	...	1	1	...	...	...	...	...	1	...	21	1	...
16	1	...	1	...	...	1	9	"	"	1	...	1	...	...	...	...	...	1	...	3	1	...
17	1	...	1	...	...	1	7	"	"	1	...	1	...	...	...	...	...	1	...	35	1	...
18	1	...	1	...	...	1	11	"	"	1	...	...	1	...	...	...	...	1	...	21	1	...
19	...	1	1	...	...	1	7	"	"	1	...	...	...	...	...	...	...	1	...	3	1	...
20	1	...	1	...	...	1	0	"	By hand	1	...	...	...	1	...	...	...	1	...	7	1	...
21	...	1	1	...	...	1	27	"	"	1	...	...	1	...	...	...	...	1	1	30	1	...
22	1	...	...	1	1	...	12	"	Breast	1	...	1	...	...	...	...	...	1	...	6	1	...
23	...	1	1	...	...	1	10	"	By hand	...	1	1	...	...	...	...	1	...	1	3	...	1
24	...	*1	1	...	...	1	10	"	Breast	1	...	...	1	1	1	...	...	...	1	26	1	...
25	...	*1	1	...	...	1	9	"	By hand	...	1	...	...	...	...	...	...	1	...	21	1	...
	16	8	21	3	14	11				18	7	10	7	5	8	1	1	2	9	22	...	20	5

WATER CARRIAGE OF SEWAGE AND TYPHOID FEVER.

By W. F. TAYLOR, M.D., D.P.H., &c.,
BRISBANE, Q.

LIKE the poor typhoid fever is always with us, it is thoroughly endemic, and never entirely absent from our community, one or more members of which are always laid low by it. In the absence of notification it is of course impossible to state to what extent it prevails during each year and during each month of the year, so that the only guide one has in forming an estimate of the prevalence of the disease is the number of cases admitted into the hospitals. The time at my disposal has not been sufficient to enable me to obtain any returns from any other institution than the Brisbane Hospital, but I think that we may reasonably conclude that these returns are a tolerably correct index of the extent to which the malady is endemic in and about Brisbane. I think that it must be admitted that the climate of Brisbane is a fairly healthy one. Epidemics, when they do make their appearance among us, are, as a rule, not very virulent, and not of very long duration, so that with the advantages which we possess in the natural healthfulness of the place it should not be a difficult matter to practically stamp out a preventible disease such as typhoid fever. But in order to do this it is obviously necessary that we take full advantage of the teachings of modern sanitary science, and apply them in an intelligent manner. The slow progress that efficient sanitation makes in the present age may be attributed to two reasons: the difficulty of making local authorities understand the necessity for improved sanitation, and the unwillingness of the general public to bear the necessary expense, preferring to temporise instead of securing an efficient system which would effect a direct financial saving in the near future, and an indirect financial saving in the improved health and well-being of the community. It is a remarkable fact that the health of the people is the last thing which appears to trouble the minds of our politicians, and the reason, probably, is that they are unable to assess it at an ascertainable money value. Disease among sheep or cattle has a direct pecuniary effect on some one or more individuals, and they soon make known their misfortune to a paternal Government, and seek for assistance, and bring the influence of their parliamentary representatives to bear in support of their claims, but the individual who may be unfortunate to contract an illness, or who may have the members of his family

stricken down by typhoid or some other preventible disease, would be laughed at were he to ask the local authority or the Government for compensation for expenses incurred, and payment for loss of time. It does appear to be somewhat anomalous, when one thinks of it, that the beast should be so much more valuable in the estimation of our governing and legislating classes than their fellow beings. That this is no exaggeration is clearly shown by the fuss that is made and the money that is, and has been, spent over the tick disease and tuberculosis among cattle, and the treatment the supposed lead-poisoning among children and tuberculosis among human beings has received at the hands of the Government and the Legislature. In the case of the supposed lead-poisoning, the Government were forced by public opinion, after ignoring the repeated solicitations of the Central Board of Health and others, to appoint a board to inquire into and report upon the prevalence or otherwise of chronic lead-poisoning in and about Brisbane and other parts of Queensland, and no sooner was the board appointed than obstacles were put in its way, and when, having overcome these and started fairly at work, it was brought to a summary conclusion by the peremptory action of the Home Secretary, backed up by the other members of the Ministry, and, notwithstanding that the Legislative Council passed a resolution to the following effect: "That, in the opinion of this House, an exhaustive inquiry should be made into the cause of the disease of the brain and nervous system prevalent among the children of this colony, ascribed by some medical practitioners to lead-poisoning, and the source ascertained as far as possible."

"That the Government be requested to institute the necessary inquiry into the cause of this disease, and the source or sources from whence such cause is derived." So far as I have been able to ascertain no effect has yet been given to that resolution. The disease still claims its annual quota of blind, paralysed and dead, and our benevolent Government pursues the even tenor of its way with apparent indifference to the pain, misery and death caused by it. Perhaps the present Government entertains a similar view on this subject that a former Government entertained respecting diphtheria. When asked by the then Central Board of Health to sanction a certain bye-law framed for the purpose of conferring power on the Board to isolate cases of diphtheria that could not be treated at their own homes without being a source of infection to those living in

the same house, refused to accede to the request of the Board, because the disease only affected children. So with respect to tubercular diseases. After a great deal of pressure was brought to bear on the Government, they, with a great flourish of trumpets, have established a single sanatorium in the whole colony. It appears to be impossible to make those who rule and govern us understand that "*salus populi suprema est lex.*" And how can the welfare of the people be promoted if their health is neglected? Hundreds of thousands of pounds sterling have been spent in the past on immigration, and it is proposed to again spend more money for this purpose, but what sanitary measures are being taken, or have been taken, to safeguard the immigrants on arrival here? The majority will, no doubt, fall victims to typhoid fever, as so many did in the past. So far as Brisbane is concerned this fever still holds its own, and produces a yearly crop of cases of very respectable dimensions, and new arrivals who have not been immunised would but help to add to the number of our fever-stricken population. Looking at the matter from a purely commercial aspect, it is a bad speculation to pay large sums of money for the purpose of endeavouring to people the country and then allowing those introduced into it to undergo the risk of falling ill, and if not becoming a burden on the public, at least losing two or three months of wage-earning time, and thereby lessening by so much the wealth production of the community. Apart, therefore, from all humanitarian considerations, from a purely economic point of view, a high state of efficiency in sanitation is necessary. Taking the condition of Brisbane into consideration, can the sanitary state of the city and suburbs be said to be in that degree of efficiency as would justify a considerable addition to the population? The water supply leaves much to be desired, and a system of sewerage is yet to be inaugurated, for apart altogether from the question of earth closets versus water closets the way in which what is politely termed slop-water is allowed to run along the water tables is both offensive to the eye and the sense of smell, for after all this slop-water is composed of everything which goes to make up ordinary sewage, minus the foetal matter and a certain quantity of urine intercepted by the pans, and does not differ chemically from the sewage of a water-closeted town. Now we know that the urine of a typhoid patient contains typhoid bacilli, in the early stages of the disease, before the patient has taken to bed, the greater quantity of his urine finds its way into the

slop-water and on to the water tables of the street, and where no cement water tables exist, to collect in holes, and in dry weather to liberate the bacilli, and thereby become a fertile source of infection to the people of the neighbourhood, and to the passers by. In addition to the urine the washings from the bed linen and from the patients' wearing apparel are sent out into the street. It cannot be a source of wonder, therefore, that Brisbane and its suburbs should furnish a very considerable number of cases of typhoid fever annually. Taking the Brisbane Hospital returns for the last ten years, from 1889 to 1898, 1,982 cases were treated in that institution, with 126 deaths. The number for each year are as follows:—

	Cases Treated.			Deaths.		
1889	648	...	...	44
1890	200	...	...	16
1891	168	...	...	8
1892	119	...	...	7
1893	63	...	...	2
1894	89	...	...	0
1895	111	...	...	7
1896	171	...	...	9
1897	266	...	...	21
1898	147	...	...	12
			1,982			126

The disease appears to have assumed epidemic proportions in 1889, but excluding that year, the average for the following nine years would be 148 per year. It is impossible to say with any degree of certainty what proportion this bears to the total number of cases occurring in the city and suburbs, but I think that we are well within the mark if we put the number down at the same amount; this would give a yearly average of 296 cases for the last nine years. Now, typhoid fever is to a great extent a water-borne disease, that is, it frequently arises from a contaminated water supply, but it arises from other sources, such as pollution of premises and soil in addition to the pollution of the water-tables of the streets above mentioned. Drs. Sydney Marsden and John Robertson have shown by their investigations that the typhoid bacillus is capable of living and growing and spreading in the superficial layers of organically polluted soils, while failing altogether to retain its vitality in virgin soils. The risk, then, of burying typhoid stools and dejecta in the neighbourhood of dwellings is apparent, and the danger arising from the so-called conservancy or pail-closets must be obvious to even the most careless and sceptical of intelligent minds. That this is a real danger is fully proved by Dr. Phillip Boobhyer, M.O.H. for Nottingham, in his paper read before the

Congress held by the Sanitary Institute at Birmingham in 1898. The title of his paper is "Endemic Typhoid Fever in Nottingham." He takes the "Cases and proportion of cases in houses furnished respectively with pail-closets, midden-prives, and water-closets" from 1887 to 1896. I omit the midden-prives statistics:—

1887.		
Houses.	Cases.	Ratio.
35,786 houses with pail closets...	369...1	in 97 houses
6,000 " " w.c's	... 12...1	in 500 "
1888.		
37,038 houses with pail closets...	354...1	in 104 houses
6,091 " " w.c's	... 11...1	in 554 "
1889.		
37,539 houses with pail closets...	326...1	in 115 houses
6,200 " " w.c's	... 10...1	in 620 "
1890.		
38,133 houses with pail closets...	305...1	in 125 houses
6,280 " " w.c's	... 9...1	in 694 "
1891.		
38,571 houses with pail closets...	337...1	in 114 houses
6,295 " " w.c's	... 11...1	in 572 "
1892.		
38,834 houses with pail closets...	178...1	in 218 houses
6,369 " " w.c's	... 8...1	in 795 "
1893.		
40,997 houses with pail closets...	435...1	in 92 houses
7,000 " " w.c's	... 25...1	in 280 "
1894.		
40,414 houses with pail closets...	304...1	in 133 houses
7,000 " " w.c's	... 10...1	in 700 "
1895.		
40,532 houses with pail closets...	385...1	in 105 houses
7,100 " " w.c's	... 14...1	in 507 "
1896.		
40,225 houses with pail closets...	400...1	in 101 houses
7,200 " " w.c's	... 20...1	in 360 "

If we take the average of these cases for the ten years, it will be found that the annual rate of incidence upon each class of house is as follows:—(1) Upon pail-closet houses, 1 case in 120; (2) upon w.c. houses, 1 case in 558. This shows that the proportional incidence of the disease upon houses with pail-closets was more than four and a-half times greater than upon those with w.c's. These are very startling facts, and should arrest the attention of even the most determined opponents of the water-carriage of human dejecta. It has been proved over and over again that all conservancy systems are bad, that the sooner all effete matters are removed from dwellings and their neighbourhood, the freer the inhabitants are from disease. In the discussion which followed the paper I have quoted from, one speaker drew attention to the part which flies play in dis-eminating typhoid fever and other diseases. It is evident that where decomposing organic matter is allowed to collect flies settling on it may afterwards contaminate milk and other

food stuffs not carefully protected from them, so that the danger from this source is very real. Instances are not wanting to show the marked improvement in the health of the inhabitants of a town following on the introduction of an efficient system of sewerage, but the difference in the effect on the incidence of typhoid fever on water-closeted and non water-closeted houses could not be more conclusively demonstrated than has been done in the case of Nottingham, by Dr. Boobbyer. No doubt similar evidence could be obtained in other cases, but so far as I have been able to discover, he has taken the lead in this respect. I trust that his example will be freely followed, and that we shall soon have further evidence on this most important subject.

THE OPEN-AIR TREATMENT OF PULMONARY CONSUMPTION.

By R. HUMPHREY MARTEN, M.B., B.C. CANTAB.,
M.R.C.S., L.R.C.P. LOND., ADELAIDE, S A.

ACCORDING to Gerhardt "The treatment of Consumption with Drugs has gone into utter Bankruptcy"—a statement with which the majority of the profession will no doubt agree, especially when it is remembered that where the number of remedies recommended for any disease is large there is a good reason for the belief that none of them is possessed of much efficacy. The same may be said of Koch's tuberculin, the announcement of which remedy in 1890 so electrified both the medical and lay portions of the community, and which has, I think, deservedly fallen into disrepute, except as a test for tuberculosis in cattle.

During the last few months all attention has been turned towards the open-air treatment of consumption, and now-a-days, whatever paper you pick up, professional or otherwise, you are sure to come across the subject of tuberculosis, and I suppose the general public has never been so well educated on the subject as during the present "new crusade." Royalty joins with the medical and veterinary professions in trying to check the disease; even Her Majesty's own dairy farm has been subjected to the tuberculin test, and no less than thirty-three out of forty milch cows have been found to be infected with tuberculosis and destroyed.

Now it has been estimated that at least 1,000,000 persons die annually in Europe alone from consumption, and as it is becoming more and more apparent that this is a preventable disease, it behoves us in this colony not only to try and stay the evil, but to cure the unfortunate persons who are already infected.

There is no doubt from our new Health Act, and the energetic way in which it is being administered, that everything is being done by our legislators and Public Health authorities to prevent the spread of the disease; in fact the sections relating to tuberculosis in our Health Act of 1898 are in advance of any legislation throughout the civilised world, not even excepting the advanced State of New York. I am not quite so sanguine as some enthusiasts, who believe that tuberculosis can be stamped out in the same way that leprosy has been in so many countries; at least, it will hardly happen during our lifetime, and we, as medical men, should face the enemy and do our best for the unfortunate sufferers. At one time I looked upon Australia as a country free from tuberculosis, except those persons who had been sent out here to be cured, but a few weeks' residence here showed me how mistaken my idea had been. There is no doubt but that under better systems of ventilation, drainage, and food supply, together with the removal of the window tax, as suggested by Dr. Whittell, the death-rate from tuberculosis in England is declining; it has steadily fallen from 3·8 per 1,000 in 1838 to 1·4 per 1,000 in 1896, and if this rate of declension continues during another thirty years Ransome concludes that phthisis will have entirely disappeared by the end of that period.

I am able, from figures supplied to me by Dr. Whittell from our Registrar-General, to show a steady decline in our own colony for the last thirteen years. During this period the death-rate has averaged about 1·0 per 1,000, and for 1897 it was 0·87 per 1,000, and during the last ten years there has been a steady decline throughout all the colonies, Victoria heading the list, the figures for 1896 being per 1,000:—Victoria, 1·21; Queensland, 0·95; South Australia, 0·88; New South Wales, 0·80; New Zealand, 0·74; Tasmania, 0·67; and Western Australia, 0·56.

But still we see from the above list how prevalent a disease tuberculosis is in a country which boasts of so much fresh air and sunlight and so little dampness of soil, and in looking round for an explanation of this fact I have come to the following conclusions:—

1. Pulmonary tuberculosis is worst where the population is densest, and as far as my experience goes, it never occurs in persons who lead a true bush life. As Straus says, it is independent of climate, of latitude, and of altitude, but it is rigorously dependent upon the agglomeration of the population.

2. I think that so many persons have come out here on account of early tuberculosis, and having improved under better climatic conditions have bred up susceptible children, or else directly infected their children, or else persons have themselves acquired susceptibility and become easily infected.

3. The main cause is to be found in the fear that people have of fresh air; in the winter they shut up their houses to keep out the cold, and breathe over and over again what has been so aptly called "air sewage," and in the summer the housewives keep every nook and cranny closed to keep out the heat and dust, and I could put my finger on several houses which I know from personal experience to be simply hotbeds of consumption, and which I cannot persuade the owners to allow fresh air to enter. I think, too, that our architects are all too much afraid of ventilation—their main idea is to keep out the heat and the dust, and I do not know any country where places of worship or entertainment are so abominably ventilated as out here.

The problem we have to solve is: How to prevent the spread of this disease, and how to cure our already consumptives? The solution lies not in drugs, at any rate in none so far discovered, not in tuberculin, although it seems quite possible that an anti-toxin may yet be discovered, but in what Sir Samuel Wilks says in ending his article on the treatment of consumption in the June number of *The Practitioner*, viz., "Air, air, fresh air," and, I would add, good fresh food.

During the last few months the whole civilised world seems to have awoke to this, and on every side we hear of Sanatoria for consumptives being erected and endowed, and I believe Dr. Gault will give us his experience in the Kalyra Home, and although I look upon this institution as a perfect God-send to South Australia, still, with its accommodation for only twenty-two patients, it will not hold one-twentieth part of our consumptives, when it is remembered that 308 deaths from this disease alone occurred in the colony for 1897.

Undoubtedly the best way to treat persons suffering from pulmonary tuberculosis is by the so-called "Open Air Treatment," which is now adopted at all Sanatoria.

The Germans were the first to introduce this method, and Brehmer, in 1854, first enunciated the principles from Goersberdorf, in Silesia; in fact, Goersberdorf has been termed the cradle of the mountain health resorts and of the hardening open air treatment in Europe.

Now what is required is a district which is immune to phthisis, i.e., a district whose native inhabitants are relatively free from phthisis. It is better that it should be elevated (although according to some authorities this is not a *sine qua non*), but the elevation allows the diminished barometric pressure to stimulate the heart, which, according to Brehmer, is of the greatest importance, and the height of the Sanatoria is supposed to bear a strict relation to their latitudinal positions, it being about eight times as high at the Equator as in Germany. But the chief importance of the climatic treatment is the purity of the air, i.e., freedom from organisms, as well as the absence of irritating particles of dust.

I think I cannot do better than take as my text the written directions a patient of mine, who is at present at Goersberdorf undergoing a cure, sent to me, which shows in a few words what treatment he has to follow:—

- At 7 a.m., one glass of milk.
- At 7.30 a.m., to get up.
- At 8 a.m., breakfast.
- At 8.30 to 9.15 a.m., to have a walk.
- At 9.15 to 11 a.m., to lie down.
- At 11 to 11.45 a.m., to have a walk.
- At 11.45 a.m. to 12.30 p.m., to lie down.
- At 12.30 to 1.30 p.m., dinner, with glass of beer.
- At 1.30 to 4 p.m., to lie down.
- At 4.30 to 5.15 p.m., to have a walk.
- At 5.15 to 6 p.m., to lie down.
- At 6 to 7 p.m., correspondence, &c.
- At 7 to 8 p.m., tea and glass of beer.
- At 8 to 8.30 p.m., to have a walk.
- At 8.30 to 9 p.m., to lie down.
- At 9 p.m., a glass of beer.
- At 10 p.m., to go to bed.

N.B.—Not to smoke to excess, three pipes daily.

From these directions you will see that a definite programme has to be undergone, and I will endeavour shortly to draw your attention to the salient points, but before doing so I would like particularly to emphasise the fact that each patient should have, according to his condition, written instructions as to how to spend his day, it would never do to recommend a patient suffering from fever and hæmoptysis the same line of treatment as a man who has few physical signs and a normal temperature; and as the condition of the patient will most probably vary, either for better or worse, it is most important that he should be under medical supervision, or within communicable distance of his medical adviser.

Firstly.—The patient at Goersberdorf has to undergo certain periods of rest, and this rest is either in hammocks or on deck chairs in the open air, or, if the weather is very bad, in rooms with widely-opened windows, or specially constructed “*liegehalles*”; temperature makes no difference, the patients stay outside in the coldest weather. It will be noticed that the patient always has a lie down before a meal.

Secondly.—The patient has to take a certain amount of walking exercise, preferably up a hill to start with, so as to have an easier task to return to his chair; but he must never over-tire himself, and seats are provided at certain points to enable him to rest if required. You will observe that he is not debarred from his evening walk from 8 to 8.30 p.m.

Thirdly.—In certain conditions pulmonary gymnastics (that is several deep breaths at stated intervals), are recommended, but this is not ordered indiscriminately.

Fourthly.—The internal arrangements must be so constructed that the rooms for sleeping in are lofty, well ventilated, with valve like windows, and warmed, if required, by artificial heat.

Fifthly.—The diet is most carefully regulated, and the cooking has to be of the best, the meals always being appetising. The amount to be taken has to be gradually increased, and by some it is thought necessary to force the patient to consume the food which is placed before him. The dishes are always rich in fatty constituents. Alcohol, as you see, is allowed in moderation.

Sixthly.—Strict discipline is enforced, and the Medical Superintendent is constantly going his rounds amongst the patients.

CERTAIN SYMPTOMATIC TREATMENT IS ADOPTED.

Fever is treated by rest in the open air, alcohol, occasional doses of anti-pyretics, and ice-bags over the cardiac region.

Sweating is checked by frictions, atropine, milk and brandy, and more especially fresh air.

Cough is controlled by drinking sips of cold water, milk, or linseed tea, with an occasional cough linctus of morphia or codeine.

Hæmorrhage is treated by rest, ice-bags to the heart, and occasionally digitalis or hypodermics of digitaline.

In *stomach and bowel* complications the diet is most strictly attended to.

Besides these methods of treatment the patients who can stand it have systematic bathing with warm water and cold douches, with partial or general frictions.

Of the 5,032 patients who have been treated at Goersberdorf, 551 (11 per cent.) have been cured, and 788 (or 15 per cent.) nearly cured.

The above is a short account of the Goersberdorf treatment, partly obtained from my patient's notes, and partly from Dr. Clifford Beale's translation of Jaruntowsky's book; but nowadays there are several works on the open-air treatment, and many sanatoria are described therein.

The first to be started in England was at Cromer by my friend Dr. Burton-Fanning, of Norwich, and, although it is situated at sea level and on the sea coast, he informs me he has had very good results.

All that is required is an immune climate, and I should imagine that there are few places in the world, excepting the large deserts of Africa, where there is a purer and finer atmosphere than in the interior of our Continent; such as the Riverina, the Gawler and McDonnell Ranges, and the high table-lands of Queensland and New South Wales. One of the great benefits of our inland country is that the patient can practically sleep in the fresh air, or in tents or huts, if well covered up with blankets.

Two gentlemen who were recommended to come out here with rather advanced phthisis I recommended to go to the McDonnell Ranges, where they have taken up country, and have been in perfect health ever since. They practically live out of doors, and sleep in the open air on the ground, and strongly object to come to town, where they have to sleep in rooms on beds, and as a digression I should like again to refer to the bushmen who, perhaps, have been travelling for weeks behind sheep or cattle, sleeping entirely in the fresh air, the first thing that happens to them when they take to a bed in town is to develop a sort of influenza cold, and for which they generally consult a medical man, and, as I said before, their chests are always found absolutely free from tuberculosis. Two of my patients have been trying to carry out the Goersberdorf treatment in our hill country, taking their cue from Jaruntowsky's work, one of them with marked success, but the other has made no progress.

When it is realised that the chief cause of the spread of tuberculosis (apart from food or direct contact) is the sputum mixed with the dust of rooms, and when it is known, as proved by Ransome, that fresh air and sunlight are the best means of destroying the virulence of the bacilli, what better place could be imagined than our northern country, where there is so much sun and fresh air—and as persons suffering from pulmonary tuberculosis have been

proved to give off bacilli when talking, coughing, or sneezing they are much better out of the house than in one.

My own idea is that we should not attempt to found any further sanatoria in our hills, though I believe it is better for the phthisical patients to be away from the more densely populated districts, but our hill climate is too moist and with too great a rainfall to be considered a perfect climate for such cases.

What I think would be far better is that such cases should be sent to the high inland districts, not far removed from the railway, and that the patients should not live in houses, but in tents, so that their habitations could be taken down and the inside exposed to the sun's rays, and their locality occasionally moved from place to place. I know there would be great disadvantages, such as food supply not being what could be obtained nearer town, and the solitary isolation to which Anglo-Saxons strongly object. There is another point about our inland country, the air is charged with ozone due to silent electric discharges passing through the pure oxygen, and Ransome has conducted a series of experiments in Manchester which tend to show that ozonized oxygen has a much better effect on consumptives than merely pure air.

The great thing, I am sure, is that as soon as a patient presents the slightest signs of tuberculosis he should remove from the towns to the far northern country, but it is no use sending far advanced cases, as they most certainly could not stand the great change and the certain amount of hardship they would necessarily have to put up with.

There is one other point I would like to mention before concluding this paper, which I feel is only a short resume of a very large subject, viz., whether it would be possible to have a State institution, framed on the same plan as our lunatic asylums, where all persons suffering from pulmonary tuberculosis should be sent, either till they recovered or death ended their troubles. This would be an ideal way of treating these cases, especially if situated as I suggest, in the far north, but I doubt if our Government would dare to carry out such a proposal—it would doubtless lead to much opposition.

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THE WANDERINGS OF A PIECE OF GRASS.

BY ALFRED SHEWEN, M.D., CONSULTING PHYSICIAN, PRINCE ALFRED HOSPITAL, SYDNEY.

Miss A. was arranging some flowers for the table on the 9th of November last, when she unconsciously picked up a piece of grass and put it into her mouth; in a moment it had slipped down her throat, she felt that it was not swallowed, but that it had stuck on the way. For two days she felt scarcely any discomfort, but afterwards she could feel a pricking when she swallowed. The discomfort increased, until later on she felt compelled to consult a medical man. All he could find was that the right tonsil was red and enlarged, but nothing could be seen of the piece of grass. Soon afterwards the right ear began to get very uncomfortable, and pain in that region soon followed. I saw her for the first time on the 21st of November; there was then some enlargement of the right tonsil, but not a great deal; there was no difficulty in swallowing, but there was great and constant pain in the ear, with much tenderness about the right joint of the lower jaw; the ear, the patient stated, felt as if it would burst, whilst a radiating pain extending down the neck added to the discomfort. The ear when examined with the speculum appeared quite normal. The pain got worse as time went on, hot fomentations, syringing the ear, leeches, and every kind of soothing remedy was tried to relieve the sleepless nights, but without success. Gradually the glands below the ear enlarged and filled the gap behind the angle of jaw. At this stage of the case the distress was so great that I asked Mr. Hankins to give me his opinion, and Dr. Brady afterwards saw the case with Mr. Hankins. They advised a constant syringing of the ear with warm antiseptic lotion. As time went on, the glands behind the ear continued to enlarge, and at last a soft discoloured spot made its appearance about 4 in. below the ear, which I opened, allowing the escape of a small quantity of matter. A few days afterwards the discharge became much more free, and when squeezing the abscess by the hand, a lump of coagulated pus tumbled out, embedded in which was the piece of grass which had caused all the trouble. It had made its way from the tonsil, passing close by the ear, downward in the neck, causing an abscess to point about 5 in. distant, and had taken about six weeks in its travels. The patient made an uninterrupted recovery after she had got rid of the grass.

EXPERIENCES OF A CONSUMPTIVE HOME.

BY ARTHUR H. GAULT, M.B. LOND., M.R.C.S., L.R.C.P., ADELAIDE, S.A.

THE Home at Belair owes its existence to the generosity of the late Mr. James Brown, and is managed by a committee of seven gentlemen. Though intended for consumptives it was euphemistically named a "Home for Diseases of the Chest," but now that it is possible to state that consumption is not necessarily incurable, it is very much better to tell patients the real nature of their case as soon as it is discovered, and we trust that "weakness of the lung" will become a rare complaint.

It was at first intended to take all patients free of charge, but as the bad times affected the revenue of the James Brown trust, it was thought better to charge patients the small sum of ten or fifteen shillings a week rather than close the establishment. This plan was tried for a year, one of the committee, Mr. Charles Goode, undertaking to make up any deficiency. The scheme was so successful, and the number of applicants so much increased, that the financial position of the Home is now quite satisfactory, the patients' fees amounting to about one-third of the total expenditure. I mention these particulars so that you may not expect our little hospital to be carried on with the resources and appliances of such sanatoria as are to be found at Goerbersdorf, Falkenstein, or Nordrach.

The buildings are substantial, but the general plan is hardly what one would have recommended. So doubtful were the committee of the success of the undertaking, that they so arranged that the three separate blocks (the male, the female, and administration) could be converted into three separate villa residences.

The rooms are lofty and well ventilated, the walls and ceilings are painted, the floors polished hardwood, and the floor space per bed amounts to 120 sq. feet. The Home provides accommodation for fifteen male and seven female patients. For a long time now every bed has been occupied, and several patients are waiting for admission. A new hall (40 x 25) is in course of construction, built and ventilated on the most approved plan, and it will form a most useful addition. This is the first instalment of a new wing, which will be completed when it is required. There is little doubt that the public is beginning to recognise the necessity of treating consumptives in sanatoria, and that the Belair Home will soon be found much too small; but if the needs of the case exceed

the powers of the Brown trust, they will, I am sure, be willing to hand the institution over to the public.

It was intended that only persons in the first stage of the disease should be admitted, but, as such cases did not offer in sufficient numbers, it was decided to admit any who had a prospect of being benefited by the treatment. The Hospital has now been opened for four years, and I venture to bring some statistics before your notice; but it is quite impossible to compare these with figures of similar institutions, as the condition of patients admitted varies so much. When I tell you that of the 126 patients admitted, only eleven have been uncomplicated cases in the first stage of the disease, you will not expect very brilliant results.

One hundred and nineteen cases of pulmonary tuberculosis have been treated. Eleven have been discharged at the end of three to twelve months as "cured"; only two of these have died, their death being brought about by alcoholic indulgence. Twenty-five have been discharged as relieved; of these fourteen have since died. Twenty-seven have been discharged unrelieved, all of whom have since died. Thirty-six have died in the institution. Twenty are still inmates.

The figures are not encouraging, but we believe that several lives have been saved that would otherwise have been lost, and many prolonged for months and years. But, in addition to this, the friends of the patient have been relieved from the risk of infection, and valuable teachings as to hygienic conditions and sanitary precautions necessary for the treatment of such a wide-spread disease has been disseminated by patients and their friends.

As to the *origin* of phthisis, we find that in about one-third of the cases a distinct family predisposition can be shown, while in eighty per cent. of cases the origin can be traced to direct infection or to working in overcrowded workshops.

We find that the *prognosis* is absolutely bad in cases where there is distinct laryngeal or abdominal disease. In such we can hope for little alleviation; they quickly go from bad to worse. Our prognosis is unfavourable when there is a weak heart with quick feeble pulse, where digestion is hopelessly bad, or where there is a regular and persistent rise of evening temperature. In such cases, improvement with gain of weight generally takes place the first few months, soon to be followed by wasting and death.

The open-air treatment is carried out as far as possible. Patients are recommended to be in the fresh air as much as they can be; the fanlights in the wards are open on the coldest nights. At first patients complain of the cold, having been accustomed to warm, close rooms, but by degrees as their night sweats disappear, as there is an improvement in their general well-being—restored appetite and less frequent cough—the wisdom of the treatment is recognised. When patients are feverish they are forbidden to take exercise, but when not feverish are recommended to take frequent short walks, gradually extended as strength permits, till they are able to wander over the hills in the neighbourhood. Bedridden patients have their beds wheeled on to the verandah when the weather permits. But we have several obstacles to the complete carrying out of the treatment. Heating is by means of open fires, and we find it impossible to keep the wards warm on very cold nights with windows wide open. The site is exposed to the wind from every direction, and the open verandahs and high-backed seats are not capable of fully guarding against it; but improvements are being made, and we hope soon to have a shelter shed artificially heated, where patients can remain in the coldest weather all day long.

Equally important to fresh air is good food. Three good meals are provided, with three subsidiary ones, the diet being generous and varied. There is no need for forced feeding, the bracing atmosphere giving good appetites. Stimulants are not given, except in cases of extreme weakness.

Important as fresh air and good food are, consumptives have many complaints which need constant medical attention. The digestive system needs constant assistance, sedatives, such as bismuth and alkalies, tonics, of which we find strychnine the best. Diarrhœa must be promptly checked, when ulceration exists we have found the beta naphthallate of bismuth the most useful drug, but nothing will relieve the severe pain but hypodermic injection of morphia. Cardiac weakness requires strychnine and digitalis. Night sweats very rarely occur at Belair, good ventilation and a bracing atmosphere being the best preventatives, but if necessary nothing is better than atropia or phenacetin. Expectorants are not given by routine, but are frequently called for, and we believe it is of great importance to check the continuous hacking cough so frequently present, for this purpose we find codeia by far the most useful drug, one good dose of from half to one grain will stop the cough for hours. The

phosphate of codeia, now official, is to be recommended on account of its free solubility.

The open air treatment of phthisis is so popular at the present time that so-called specific treatment is almost abandoned, but we think there are many cases, especially advanced ones, where such treatment may materially assist. In gauging the value of drugs in pulmonary tuberculosis we must be careful to distinguish the improvement brought about by healthy surroundings, good food, and in forming our estimate we have waited till the first effect of such a change has passed away.

Cod-liver oil, if it causes no digestive disturbance, is of great value, but we have never seen any good results from arsenic or hypophosphites. Eucalyptol we gave a fair trial in several cases, internally by emulsion or in capsules, and by inhalation. The patients bore it well, but it seemed to have no beneficial effect.

Ichthyol, so much praised by some observers, was also tried in doses of ℥x. to ℥xx. three times a day for several months, but no distinct advantage could be attributed to the drug. The only member of the creosote series that we have used extensively is guaiacol, and we believe it to be of undoubted value. We never could convince ourselves that it produced any definite diminution in the number of bacilli in the sputum, but it does seem to hinder the spread of the disease; and nearly all who take it, long after the novelty has worn off, say that it "strengthens the lungs." We prefer to give it freely diluted in an emulsion or with glycerine, and it is very few patients who cannot take ℥vi. to ℥xii. three times a day; one patient has taken such a dose regularly for four or five years, and, in spite of advanced disease in one lung and incipient in the other, maintains her weight and health, which she attributes to the guaiacol.

We tried it in six cases by subcutaneous injection, ℥x. of the pure drug being injected daily into the thigh for two or three months. No local disturbance was caused, but as the treatment was troublesome and did not seem to possess any distinct advantage it was abandoned. One decided disadvantage of this method was that it did not produce that gastrointestinal disinfection which we look on as very valuable. As far as our experience goes, no patient who systematically takes guaiacol ever suffers from intestinal ulceration, and very rarely from laryngeal infection. I have not tried the intertracheal injection of the drug.

My experience of tuberculin has been limited, and that it has not been as encouraging as that

of others may be due to the fact that my faith in it was small, and I would never use it on any patient who had not already tried other means without success. The seven cases in which I tried it had well-marked disease, in most both lungs being affected, but the general health in each was good, and the evening temperatures under 99·6°. I used all the precautions recommended, and in the course of three or four hundred injections never saw any local disturbance. I began with a minimum dose of ·00001 c.c. given twice a week gradually increased. In two cases, owing to slight reactions and general malaise, the injections were soon discontinued; both cases rapidly got worse and died within six months. In three cases there were frequent slight reactions, and, after three months, the treatment was discontinued; whilst in two cases it was persevered in for eleven months, the maximum dose being ·07 c.c. The results were as follows:—In two cases we believe the effect was distinctly hurtful. Of the three treated for three months, there was no improvement in any, two dying within eighteen months and two years respectively; the other, at the end of two and a half years, is alive and doing well. The other two, continued for nearly a year, are still alive, the disease having made no progress; one of them, an unfavourable case where both lungs were extensively affected, seemed to be decidedly benefited by the treatment, the amount of expectoration diminishing and physical signs showing definite improvement, and he is now earning his own living. In spite of the apparently good results in this case, we came to the conclusion that the tuberculin treatment was attended by risks, was exceedingly troublesome, and its efficacy doubtful. Last year I tried Koch's new tuberculin on four patients, as before all old standing cases but with good general health and low temperature. I used it in exactly the same way as tuberculin, but increasing the dosage much more rapidly. In two cases the treatment was stopped as they did not seem so well, in the other two it was persevered in for three months till the dose amounted to ·2 c.c., but as my supply ran short and I could find no improvement, the treatment was abandoned. We came to the conclusion from our very limited experience that the treatment by new tuberculin did neither harm nor good, but that it was very expensive. After reading Dr. Murrell's paper in the *British Medical Journal* on the treatment of tuberculosis by formalin vapour I determined to give it a good trial. You will remember the excellent laboratory

results obtained by Dr. Murrell. Pure cultivations of tubercule bacilli were frequently sterilized after being exposed to the vapour from a six per cent. solution of formalin for two hours. Formalin vapour seems just the thing we want, its germicidal power is unequalled, it is non-poisonous, and diffuses readily, having a density about the same as air. It has some drawbacks, its inhalation causes a burning sensation in the nose and back of pharynx with a tickling cough and occasional tendency to sickness. By inhaling it through the mouth, using it very weak in the first place and gradually increasing the strength, most patients take it readily and soon get to disregard the unpleasant odour. It is advisable that compressed air be used as persons with diseased lungs inspire badly, and the effort to take deep breaths cause headache; with compressed air no effort is necessary, and the vapour is sure to reach the diseased part. The simplest method is to fill a drum with compressed air—the air is passed through a strong wash-bottle containing the formalin solution, the amount of air being regulated by a tap, from thence to the patient's mouth through an indiarubber tube fitted with a glass mouth-piece—expiration being performed through the nostrils. We find it wise to begin with a 1 p.c. solution (of formaldehyde), gradually increasing up to 3 p.c. It is too early yet to form any estimate as to the value of the treatment, but it is decidedly encouraging, and we hope at some future date to communicate to you our results.

In conclusion, I might say that every hygienic precaution is taken in the hospital, and the health of the nurses and attendants is excellent. Strict attention is paid to personal cleanliness; the patients are only allowed to expectorate into cups containing a disinfectant, or spittoons containing sawdust. These are emptied daily into a tin of sawdust, which is burnt in a furnace. Each patient carries in his pocket a cheap substitute for a Dettweiler flask.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 30th June, at 8.15 p.m.

Business :—General.

G. T. HANKINS, Hon. Secretary.

PRESERVATIVES IN MILK AND BUTTER.

By LOUIS HENRY, M.D., MELBOURNE.

THE wholesale manner in which preservatives are distributed with our food supply has long been to me a subject of deep concern. I have felt that the general apathy of the individual to interest himself in a matter about which there seemed to be very little known, and which probably did not affect himself, was the cause of this general indifference. This tolerance on the part of the authorities has emboldened manufacturers to publicly advertise the anti-septic and preserving qualities of their drugs, which they strongly recommend for admixture with our food. Even in connection with our fruit, it was stated a few days back that grapes intended for export should be dipped in a solution of formalin. The injurious effects which are risked and experienced by admitting preservatives with our food I have attempted to elaborate in this paper. I would like to say that I have carefully avoided offering any suggestions as to what methods should be substituted in preserving milk and butter, as I think that any such remarks would seriously affect the aim and object I have set before me. It is because I recognise the importance which the butter industry means to this colony that I feel that the addition of any ingredient to the butter, and which would depreciate its value, should be condemned. Although the illustration is not entirely identical I would remind you that the admixture of alum with bread in any quantity is punishable by law, and if I succeed in convincing you of the harmfulness of adding preservatives to milk and butter I hope you will influence the legislature to place on our statute books a similarly prohibitive law with regard to preservatives.

In order to keep milk and butter for any length of time, substances are added which are known under the general term of preservatives. These consist of ingredients which are manufactured in large quantities in chemical laboratories. Owing to the emulsive character of the milk, the addition of these drugs is not detectable by the taste. The most common of these antiseptics in use are: boracic acid, salicylic acid, and formalin. The object which it is desired to attain by the addition of preservatives is to delay the turning of the milk, and to retard putrefactive changes in butter.

Milk consists of a multitude of cells suspended in serum. Some of the cells are fat

cells, which help to form the cream, and are of the nature of white blood corpuscles. The living cells contain considerable vitality for some time after the milk has been drawn. They seem to be immediately absorbed without the powers of digestion being used. They enter the blood stream direct as living protoplasm, and are utilised at once for the building up of tissues.

Pure, fresh milk has considerable power as a germ destroyer. The bacteria of cholera and typhoid, when added to pure and fresh milk, are actually destroyed to within three hours after the milk has been drawn. This germicidal power in milk seems to be one of the safeguards supplied by nature against disease.

Associated with its character as a food, milk also contains a number of ferments, such as the milk and starch ferments, which are, more particularly in the period of early childhood, indispensable in aiding its digestion. Milk being the principal alimentation for the very young, any departure from its normal standard is resented by their delicate digestive apparatus. By the addition of chemical antiseptics to our food, the ferments are destroyed, the vitality of the living cells are impaired, and the germicidal safeguards are neutralised, and those changes which this food has to undergo before it can be assimilated are retarded. In all directions the food value is deteriorated.

The addition of chemicals to our food is injurious in other ways. The pharmacological action of these drugs on our system may not be immediate in their effects, but their continuous uses are in each instance accompanied by grave results, and are decidedly harmful. These bactericidal agents destroy the beneficent action of nature's processes. The changes which food should undergo in the stomach are delayed, the stomachic secretions are interfered with, and the natural ferments are impaired, digestion and absorption are thrown out of gear, the result being the introduction of dyspepsia and inanition. Children who are dependent on milk and butter as their chief food become backward in their development, growth and teeth. They grow up puny and suffer from digestive troubles, which necessarily remain as long as they have to subsist on such food. If food is sterilised, that is, if we destroy all germ life, there would be no digestion, and we would die of starvation. Hence the exclusive use of sterilised milk as a food induces rickets and scurvy. We require germ life to digest and assimilate our food. Many of the inert bacteria aid very materially in the digestive process by converting the albuminoids into

peptones as well as assisting in the manufacture of pepsine.

The following are the principal preservatives in use:—

Chloride of sodium, or common salt, is an antiseptic, and in small doses it is a useful drug and food, aiding in maintaining the alkalinity of the blood and tissues and in the formation of the gastric juice. It is changed by the lactic acid of the stomach into lactate of soda, thereby setting free hydrochloric acid, which aids not only in digestion but in the production of pepsin from the pepsinogen of the gastric tubules. At one time butter was imported to this colony from Cork preserved in salt. The butter, on arriving here, underwent a process to dissolve out the salt and then found a ready market. This process is not, however, to be recommended, as the frequent handling of butter increases risks of deterioration.

Salicylic acid is, as a rule, prepared by the action of carbonic anhydride on phenol. It prevents fermentative and putrefactive changes and is generally an antiseptic. It is largely used for surgical dressings and medicines for rheumatic affections. It has no smell and is not volatile. Continuous administration acts as a direct poison on the heart and respiration. It arrests digestion, and may induce, in excessive doses, general paralysis and death from ensuing respiratory failure.

Boric acid is obtained for medical purposes from borax by the action of sulphuric acid. It possesses mild antiseptic and antiputrefactive properties, but it is not destructive to all low organic growths—for instance, mould fungus. Long-continued internal use may give rise to a skin affection, to dyspepsia both gastric and intestinal, and also to albuminuria. It is eliminated by the urine, partly as borax. In disease of the kidneys it is eliminated slowly, and may thus allow toxic symptoms to develop. When given internally to the higher animals in doses of thirty to sixty grains, boric acid acts in a toxic manner. It will produce gastro-enteritis in rabbits, which will end fatally in a few hours. One hundred and eighty grains administered to a man in three divided doses at short intervals have produced, within ten hours, nausea and vomiting and other poisonous symptoms.

The quantity of boric acid which is added to butter, according to a statement of the dairymen themselves, may vary from 0.5 per cent to 1.2 per cent. This may be so, as far as the butter itself is concerned, but we possess no record of any estimate of the quantities

thrown into the milk before the butter is made. A reading of the figures would, therefore, mean :—0·5 per cent. is equivalent to 35 grains of boracic acid to each pound of butter ; 1·0 per cent. is equivalent to 84 grains of boracic acid to each pound of butter ; 12 ounces to the hundredweight is equivalent to 0·668 per cent., or that 46·8 grains are added to the pound of butter.

A child who consumes two ounces of butter daily would swallow from four and a half to ten and a half grains with its food. A child taking both milk and butter impregnated with boracic acid must naturally consume a great deal more than the figures indicated, with results that may be imagined and with which medical men are now tolerably familiar. The picture naturally forces itself on us of the milkman dipping his hand into a large box of preservative and throwing it into the milk, and then again the butterman, in a reckless manner, generously doing the same.

The Parisian journal, *L'Illustration*, lately wrote, under the heading "Preservation of Food-stuffs by Boracic Acid":—

"Boracic acid and borax, undoubtedly, are admirable preservatives for milk and butter. Many dairymen appear convinced about their efficacy, as to which they have nothing more to learn. They have even gone so far as to claim for them official sanction. It is questionable whether the digestions of the consumers are equally convinced. Boracic acid, though not a deadly poison, is, by no means, a wholesome food, and its continuous and immoderate use cannot be persisted in without ill effects. So agrees Dr. Hill, an English hygienist, who, after a long series of varied experiments, was astonished to find that out of 1,616 samples of milk submitted to him for analysis, 59 were preserved by boracic acid, as were 216 out of 574 samples of butter. The same analyst has detected borax in sausages, cream, etc. Now dogs weighing five kilogrammes, if given eight grammes of boracic acid daily with their food, become ill, lose weight, and suffer, more or less, from intestinal troubles. Further, boracic acid would be particularly dangerous to young children, even in small doses of half a gramme a day. Finally, another English doctor gives a serious case of the poisoning of five persons, four of whom died, through drinking milk which, passing through the hands of several middlemen, had been adulterated by each of them with boracic acid in unknown proportions. It must be added that boracic acid comes from various sources and that its purity varies also. It is probable that the advocates of the use of

these preservatives are not so careful of the health of the consumer as to use only acid of the greatest purity, and, consequently, of the highest price."

Formalin is prepared by passing the vapour of methyl alcohol over red hot coke. One in 50,000 prevents the growth of bacteria in meat solution. A 3 p.c. solution will kill all pathogenic organisms in a minute. Its action is powerfully antiseptic in preventing decomposition and fermentation. It is also used for hardening microscopic specimens, and as a general disinfectant. Inhalation may produce poisonous symptoms, and it has been proved fatal to the lower animals. Physiologically, it acts by modifying the character of the blood, so that hæmoglobin passes out from the corpuscles into the plasm. The blood vessels contract, their walls being altered, and the corpuscular elements escape into the tissues. Formalin is largely used by dairymen as a milk preservative, as it seems to them an excellent substitute for other more easily detected chemicals, like salicylic acid and boracic acid. It is used in the strength of 1 in 12,000, which will keep the milk sweet for three or four days. It may be detected by treating the suspected milk with small quantities of a mixture of sulphuric acid and ferric chloride, which produce even in a very weak solution of formaldehyd, a distinct purplish-violet reaction.

Looking at the question of the addition of chemical preservatives to our milk, we are compelled to state that such milk is no longer a natural product. It is not the food which nature has supplied, but an artificial product of human invention. It may, in some instances only, be no longer dangerous from its bacterial contents—but it is not nature's milk, and its harmfulness to ourselves is undoubted. Another objection to their use is that, as a rule, preservatives, in the quantities which are added to milk or butter, are not able to exert any destructive influence on those micro-organisms which find this class of food an excellent culture-ground to thrive on. But the dairyman, ignorant of any knowledge of bacteriology, in the fulness of his belief in the value of his preservatives, exhibits a careless indifference with regard to those precautions of sanitary cleanliness in the handling and delivery of his milk, which, under ordinary circumstances, would be his sole available means of protecting milk against decomposing changes and contamination.

The views of analytical chemists in favour of this or that drug and its harmlessness are frequently quoted by manufacturers or trade

distributors, but analytical chemists have no qualification whatever entitling them to offer any opinion on the matter. What experience is a chemist able to obtain on the toxic effects of a drug? While the quantities employed may be small so that the effects on an adult, may, in a measure, be ignored, still we know that a cumulative action exhibits itself when drugs are introduced into the body over long periods of time. The subject assumes all the greater significance when it is remembered that this food, which it is attempted to preserve, is a substitute for mother's milk, and is the chief staple diet of the young.

We can have little hesitation in condemning the use of preservatives on hygienic grounds, and because it is next to impossible to assign and enforce the limits within which their use is innocuous, and therefore hygienically permissible.

The question of the legality of the addition of preservatives and milk should be placed on a sound basis. There are many and obvious objections to the use of antiseptics in articles so largely consumed as milk and butter. A number of prosecutions in England have been conducted against persons selling butter containing boracic acid. At Pontypridd, in Wales, the County Council of Glamorganshire instituted proceedings against some grocers. The butter was found on analysis to contain .9 per cent., or 63 grains to the pound, of boracic acid. The quantity discovered was not disputed, but defendant contended that under the Margarine Act he was entitled to use the boracic acid as a preservative, as the section of the Act stated that salt or any other preservative could be used. "The chief consideration," the stipendiary magistrate in summing up said, "was that if an excessive quantity was used it did not come under the description of a preservative, and it was important, therefore, to consider whether the quantity used in this instance could properly be considered a preservative. The scientific witnesses called by the prosecution stated that the quantity was very much in excess of what would be required. They further stated that the maximum which could be used with any safety was from .2 to .3 per cent., equal to from 17 to 20 grains to the pound. The analysts seemed to confine their evidence to their estimate of the smallest amount of boracic acid required to preserve a pound of butter. One witness believed that in hot weather 35 grains to the pound was necessary. Some of the witnesses referred to 10 to 15 grains of boracic acid being an innocent dose, but their evidence was valueless be-

cause they had never tested it for a continuous length of time. Not much value seemed to depend on the effect of the continuous use of the drug on human life; the burden of this proof fell upon the defendant. His evidence seemed unsatisfactory, as the medical men treated it as an unsafe drug. The effects seemed little known. One doctor stated that an excessive dose would produce diarrhoea, indigestion, and mild blood-poisoning, but not one of the witnesses was rash enough to say that he would administer ten grains from day to day and trust to its not producing anything injurious, and no evidence had been given that the acid could be administered in either large or small doses with impunity for a continuous length of time. The defendant had utterly failed to prove that it was not injurious to health, and the impression left upon the minds of the Bench was that it was a dangerous drug." Defendant was fined £10 with costs.

I have carefully abstained from dealing with the economic and industrial aspects of the question. My sole object has been to establish evidence of the general employment of preservatives and the injuriousness of their use. In my lecture on "The influence of Milk in the Production and Dissemination of Disease," which I recently delivered before "The Australian Health Society," I explained the methods which should be adopted to control the production and distribution of milk, so that, ultimately, it would not be necessary to take further measures in order to destroy micro-organisms or living tubercle bacilli.

If, in these days of unlimited competition, the commercial aspect of life is the one aim of the individual, regardless of the misery and suffering which the adoption of this view entails, then there would be an end to human sentiment, and human nature would descend to the very lowest estimate. We cannot, even for a moment, imagine that our legislators, when the subject of our food supply is dealt with and explained, would tolerate conditions that must destroy all the higher qualities of manhood and demoralise every sphere of our community.

Among the public there seems to be a growing conviction that they must look for guidance in the solution of all health problems, not to the Government, but to the medical profession, which stands pre-eminently independent of all party factions and interests. It is our duty to confirm such a reputation, by strenuously exerting ourselves in championing the cause of the people. We could do this best

by continued advocacy of the practical adaptation of scientific truths. The future and prosperity of a state depend on the growth, development and vitality of its children. They should be reared and fitted out to fulfil the manifold requirements of life with sound health and vigour, and I consider it a part of the mission which the aspirations of our profession impose on us to treat all matters that concern the young and helpless thoughtfully, thoroughly, and fearlessly.

NOTES ON THREE CASES OF HYDATID OF LIVER.

BY R. E. SHUTER, M.B., Ch.B., PORT AUGUSTA, S.A.

READ AT THE APRIL MEETING OF THE SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

H. C., *æt.* 25; admitted 22nd July, 1895. States she had been tapped for an abscess of the liver about four months previous to admission. Since then she had noticed continuous indefinite pain in the stomach and a swelling there which was getting larger.

On examination, the patient was deeply jaundiced, and presented a smooth swelling in the epigastric and left hypochondriac regions, it was tympanitic over a small area and a sense of fluctuation was made out. Urine contained bile. There was a small scar in the abdominal wall over the swelling, where a trocar had been passed in.

An incision was made just to the right of the scar, vertically through the abdominal wall, and the surface of the liver exposed. It was soft, fluctuating and adherent to the parietal peritoneum. The peritoneal cavity was quite shut off by the adhesions. An incision was made directly into the liver substance and the abscess reached at a depth of about one-eighth of an inch; some foul smelling gas, a large quantity of pus and some broken down hydatid membrane and parts of a large cyst escaped. A large rubber drainage tube was inserted to the bottom of the cavity and the wound dressed. There was a profuse discharge of bile for the first week and the patient became very low. I had no iodoform gauze at hand, and I had not then heard of packing the cavity to limit the pouring out of bile.

She was discharged on 10th September, six weeks after operation, perfectly recovered. The jaundice rapidly cleared up; she has remained well since.

Remarks.—This case illustrates—

1. The incomplete result from the now obsolete method of tapping hydatids.
2. The formation of gas in abscesses due to degenerating hydatid.
3. The occurrence of jaundice in hydatid of the liver, due to mechanical obstruction by pressure of the swelling.
4. The danger arising from profuse discharge of bile from a cavity in the liver from which an hydatid cyst has been removed by Lindemann's method.

P. L., *æt.* 40 (?), aboriginal; admitted 20th December, 1897; states that she has been ailing for a long time. The pulse was 88 per minute, small, weak and regular. The abdomen measured in circumference 41½ inches. A number of discrete tumours of varying size were felt throughout the abdominal cavity,

with a large one apparently either attached to the under surface or in the liver.

On 7th February, under ether, three incisions were made in the abdominal wall, one in the mid line below the umbilicus, one in the left iliac region, and one midway between these two. Through these incisions nine hydatid cysts were removed, some bud-like ones in the omentum were peeled out entire; some attached to the bowel were cut off, leaving a cup of adventitious cyst behind. In every case the mother cyst was carefully removed, and the ectocyst examined by the eye before returning. Wallaby tendons were applied to bleeding points and the peritoneal cavity thoroughly irrigated with boracic lotion. The abdominal wounds were completely closed with salmon gut and horsehair. The patient was rather low for a few days after the operation, the temperature never rose above 100°; in seven days some of the deep stitches were removed. The abdomen was quite soft and free from tenderness.

On the 26th inst., 15 days after the operation, the patient was walking about with the wounds firmly healed, with the exception of the skin edge of the central incision, which did not unite by first intention.

On 19th March, six weeks after first operation, four incisions, each about three inches long, were made in various parts of the abdominal wall, and a number of cysts removed. When measured after the operation there were about two quarts of hydatid membrane and tags of omentum when the fluid was drained off. In some cases I ligatured and removed pieces of omentum carrying numerous small hydatid cysts. Wallaby tendon ligatures were used when required. Through one incision I could feel a large cyst attached to the under surface of the liver. I could not get at it except by making a fresh incision, and the patient's condition did not render any prolongation of the operation advisable. The wounds were closed with single deep cat-gut sutures and horse hair, two quarts of normal saline solution were run into the bowel with a long tube, and the patient sent back to bed. The patient rallied well; she had some suppuration at the seat of two incisions, with a discharge of a small portion of hydatid membrane from one. She had no symptoms of general peritonitis, nor were her symptoms at any time serious enough to cause grave anxiety. For the first two weeks after operation she complained, off and on, very much of pain in the back. She was discharged on 18th May, two months after operation, with her abdominal cavity apparently clear of cysts, and in fair health. I was anxious to remove the large cyst which remained attached to the under surface of the liver, but the patient was feeling very well, was hopelessly homesick, and nothing would persuade her to stay longer in the hospital.

Remarks.—1. I desire to call your attention to the small amount of shock attending the first operation. When that operation was performed the patient's condition was not at all favourable, her pulse was very weak and feeble, and she had been suffering for some time from abdominal pain, indigestion and vomiting. The patient was up in a fortnight, and in four weeks her health very greatly improved, and she was able to submit to the severe measures practised at the second operation.

2. I did not flush out the peritoneal cavity after the second operation. Kangaroo ligatures were used as required. We kept the area of operation well under sight all the time, so that bleeding points were dealt with at once, and I preferred disturbing the viscera as little as possible so that the omental stumps and sites of removal of the cysts should remain as much as

possible in apposition with the incisions in case of suppuration occurring.

3. In multiple hydatid cysts of the abdominal cavity there are more or less numerous adhesions, which limit the movement of the viscera and increase the tendency for any localised pus formation to find its way out at the recently closed incision.

4. There will necessarily be considerable weakening of the abdominal wall at the sites of the incisions, but there was no bulging whatever of the scars when she left the hospital.

I heard 12 months after the operation that the patient was alive and living with the blacks in camp. She was travelling about with them and said to be in fair health.

A. E. H., *æt.* 32 years, blacksmith; admitted 17th February, 1898. For the past 12 months the patient had suffered from continuous pain in the right side, which was gradually getting worse. His appetite was good, bowels regular, temperature normal, urine normal.

Examination showed the thoracic organs healthy. The hepatic dullness extended below the ribs to the extent of three inches. The liver could be felt, and presented a smooth, irregular surface, the most prominent point being just to the right of the epigastrium; no fluctuation could be detected.

On 26th February an incision was made through the abdominal wall, vertically, and over the most prominent part of the tumour. The lower edge of a large cyst could be seen, and was felt extending backwards over the convex surface of the liver. The hydatid cyst was covered in by an adventitia, which was tough and about an eighth of an inch thick. The cyst wall was firmly fixed with catch forceps, and its fluid contents partly emptied by a trochar and cannula; it was then drawn well up into the wound, flat sponges being used to protect the peritoneal cavity from the result of leakage, and freely incised. A large sterile mother cyst was extracted. The cavity was well irrigated with boric acid solution, and its wall carefully swabbed with sponges on holders until no shreds of membrane came away on the sponges, and a second free irrigation brought nothing away. Owing to the cyst running back over the upper surface of the liver, and my having opened it at the lower edge, the interior of the adventitious sac could not be examined by the eye. The adventitious sac was dropped back, and the parietal wound firmly closed. His temperature in the evening of the third day from operation registered 101.4°, and 100° on the fourth and sixth. After the last of the stitches were removed his pulse and temperature remained normal. He was discharged on 18th March, 20 days after the operation, apparently quite well, with the wound firmly closed, and my note says "no tenderness or swelling to be detected."

On 1st April, a fortnight later, he was re-admitted, with a febrile pulse and temperature. He stated that he had been quite well for nine days after going home, and then had an attack of vomiting accompanied by a cough and pain in the region of the liver.

On examination, the hepatic dullness extended about four inches below the edge of the ribs. There was a prominent swelling at the site of the old scar, tympanic on percussion.

A few days afterwards the abdominal wall was opened by a vertical incision just outside the old scar. There were no adhesions at the site of the old scar to the abdominal viscera. There were one or two slender bands of adhesions between the diaphragm and the convex surface of the liver, but nothing of a general

nature. I could not see or feel the cicatrix of the incision I had made in the adventitious sac. The cavity in the liver had filled up and was fairly tense. The cyst wall was anchored firmly to the abdominal wall by four silk sutures, incised, and some foul-smelling gas, a large quantity of pus, and a considerable-sized piece of hydatid membrane evacuated. The cavity was packed with iodoform gauze, and his recovery was uneventful. On removing the gauze packing the last part removed was generally bile stained; there was never at any time a profuse discharge of bile. The temperature went up one evening to 100.6°, but otherwise kept below 100°. He was discharged on 30th June, about 10 weeks after the operation, with a small discharging sinus.

Remarks.—The piece of hydatid membrane removed at the second operation was probably a piece of the mother cyst which had been left behind. It may have been the cyst of an adjoining hydatid which burst into the cavity, but I do not think it was. The rapid recovery from the first operation was, I think, proof that no septic germs were introduced at the time of operation.

The case illustrates—

1. The danger of Russell's operation for removal of hydatid cysts of the liver or elsewhere, the interior of which cannot be visually examined.

2. The comparative safety of Lindemann's operation in hydatids of the liver, in which incomplete removal of the cyst at the time of operation would not sensibly increase its danger.

3. The tendency that there is in suppurating hydatids towards the formation of gas.

4. The support that is given when the abdominal wall is intact to thin-walled cysts, which was sufficient in this case to prevent the giving way of a comparatively recently united incision when subjected to distension by pus and gas.

5. The comparatively small amount of bile excreted when large cavities in the liver are packed after operation, instead of drained.

A CASE OF HERNIA CEREBRI.

By R. E. SHUTER M.B., Ch.B., PORT, AUGUSTA, S.A.

A. B., *æt.* 16; was admitted to the hospital on the 3rd of May, 1895. He was unconscious and suffering from a compound comminuted fracture of the left frontal and parietal bones. Temperature, 99.6°.

About three hours previously he had received a kick on the head from an unshod horse. A surface of brain about two square inches in extent was exposed, the dura mater was lacerated, the exposed surface showed lacerated brain tissue, blood clot with large and small pieces of bone embedded in it. The skin wound gaped widely, a flap being lifted off the skull and attached by a narrow isthmus. There was no depression or fissuring of the surrounding bone. The whole area was thoroughly cleaned with 1 in 20 carbolic lotion, all the bone and blood clot, shreds of dura mater, and some lacerated brain tissue were removed, the flap of the scalp was stitched over part of the exposed brain surface, and the wound dressed with double cyanide gauze with firm pressure.

4-5-95.—The next day the patient was quite conscious, and felt nothing wrong beyond a slight headache. For the next five days the evening temperature went up to 101°, but gradually improved until it was normal on the sixth day after the receipt of the injury. During this time a certain amount of soft brain matter came away on the dressings, which were

changed every second day. The patient had no vomiting or marked headache or sensory or motor disturbance.

12-5-95.—On the ninth day from the injury the temperature went up to 101·8 in the evening, but came down again to normal after free purgation.

25-5-95.—On the 22nd day the temperature was quite normal, the wound was sweet and clean, the skin flap had shrunk up so that it did not now cover any part of the exposed brain. The brain matter was projecting to the extent of from half to three-quarters of an inch, was pulsating vigorously, and becoming covered with granulations. Pressure on the protruding portion caused no symptoms or feeling of discomfort. The circumference of the hernia was greatest at its base, there was no constriction of the base.

30-5-95.—A week later, four weeks after the accident, the patient was keeping well in every way, but the hernia showed no tendency to decrease, but rather the reverse. A probe was passed round the base of the hernia separating it from its adhesion with the skin, and an elastic ligature with slight tension was tied round in the groove formed. The patient showed no reaction, the ligature was tightened a little on alternate days and gradually cut its way through, the separated portions of brain matter sloughed off. In 11 days the ligature had almost cut its way through, and the brain matter was beginning to push out again round the periphery of the hernia. The ligature was removed, the isthmus remaining was divided with scissors, and about two-thirds of the exposed surface was covered in with sliding flaps. Two days later the rest of the surface was covered in with a third flap. The flaps united well, the prominence formed by the projection of the brain matter flattened down, and in three weeks the patient was convalescent.

Three months afterwards he was seen, the opening in the bone had partially filled, pulsation could be felt in the centre of the depression. He suffered from slight headaches at times, but was otherwise perfectly well. He showed no sensory or motor disturbance or loss of intelligence. His memory was lost for events occurring in the four days subsequent to the accident.

About four months after this he had an epileptic fit. During the last three years he has had two mild fits coming on suddenly without any aura. He has had a slight headache on one or two occasions, but keeps in good health and follows his occupation of driving a fruiterer's cart.

Remarks.—Hernia cerebri is due to intra-cranial pressure caused either by tumour, abscess, or other foreign matter in the brain, or depression of bone, or by encephalitis more or less localized, or meningitis, or both combined. Dean, in the "System of Surgery" edited by Treves, says, "The ordinary hernia cerebri following a fractured skull rarely appears before the third day, and its appearance may be delayed for some weeks. In these cases the increase of intra-cranial pressure producing the hernia is always due to the presence of septic inflammation in the brain and meninges." All recent text books that I have seen concur in denouncing ligature or shaving off of the hernia. In the case of the patient under consideration, I do not see how there could have been septic inflammation, as I understand it, of the brain or meninges. If left alone, cicatrization over such a large surface of brain must necessarily have been a long process and attended with a certain though slight danger of septic infection occurring at any time. The application of skin flaps forms a very efficient method of applying pressure and inducing absorption of any exudation remaining as the result of the previous inflammation.

At the time of the operation the patient's temperature was normal and had been practically so for three weeks, and his symptoms, I think, showed that there could be no progressing inflammatory mischief present. I see no reason why such hernias should not be treated by ligature in this way. While dressing for Mr. G. M. James, at the Melbourne Hospital, I attended a similar hernia in the occipito-parietal region, which was treated in a similar way with a successful result. The after history of this patient I know nothing about.

PROCEEDINGS OF BRANCHES.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting was held in the Rooms, Collins Street, on Wednesday, May 17th, at 8 p.m. Present: The President (Dr. Kenny, in the chair), and Drs. Kent-Hughes, Springthorpe, Laurence, A. V. Anderson, Howard, Henry, Hall Owen, J. R. Thomson, Officer, and Brett. Dr. Cherry was also present as a visitor.

The minutes of the previous meeting were read and confirmed.

Dr. L. HENRY then read his paper on "Preservatives in Milk and Butter." (See page 242.)

Dr. SPRINGTHORPE thought that the question of pure milk came well after the recent discussion on summer diarrhoea. He hoped before long that they would have local guarantees as to composition and percentage of fat, albumen and carbo-hydrates, as in America. As for purity, the question was extremely complex. From the cow itself milk might carry tubercle, typhoid, anthrax, and various pyogenic cocci, as well as scarlatina, diphtheria, and foot and mouth disease. Then from lacteal ducts, dung, fodder, air, etc., might come innumerable bacteria, including the colon, and hay bacilli and others very tenacious of life. As showing the number, ordinary fresh milk was estimated to contain from one to five millions per c.c., with an average of three or four. Time and temperature produced an enormous increase. Thus in nine hours the 9,300 per c.c. in a certain sample increased to 46,500, 1,100,000, 35,280,000, at 15°, 25°, and 35° C. respectively. Then, with the keeping, it developed a further flora of its own, setting up lactic and butyric acid fermentations, the former, though souring the milk, being the natural preservative against the latter, the gas-forming series that produced flatulence and poisonous albuminoids. The results of the foregoing were so disastrous under our artificial conditions that something had to be done, and thus the discussion could not be kept strictly within the narrow boundaries laid down by Dr. Henry. In practice some expedients had to be adopted as the lesser of two evils. It was found that *cold* modified, but did not arrest all the increase, commercial milk containing up to 1,000 per c.c. of germs capable of developing at 0° C. Simple *scalding* killed the tubercle, the typhoid, and the vegetative forms of anthrax that alone enter from the cow. It also destroyed, however, the lactic acid series, but not the more poisonous butyric. As regards preservatives, so-called, the commonest in use appeared to be salicylic acid, boracic acid, and formalin. Unfortunately we had no reliable evidence as to the quantities in general use, and no accurate data as to their effect either on the germs or on nutrition generally. Salicylic acid had considerable antiseptic and but little germicide power, 1 in 1,000 would kill non-spore-bearing in 4-6 hours, but

2½ per cent. would not kill spores. Boracic was a feeble germicide, though a useful antiseptic (1 in 150), a saturated solution would not destroy pus cocci in five hours. Formalin was far more powerful, 1 per cent. solution would destroy non-spore-bearing germs in 30-60 minutes. There was then no certainty what the quantities in use actually did. Then their effects on the milk as a food required special attention. M. de Bavay, in his laboratory, had found that salicylic acid prevents saccharification, does not precipitate albumen to any extent, but acts probably upon all enzymes, and what evidence there is, is in the direction of interfering with peptonisation. Boracic acid does not affect saccharification or precipitate albumen, and if it affects fermentation would affect the lactic acid and not the butyric; whilst formalin does not affect saccharification, but precipitates the albumen, though the gastric juice might bring it into solution again. All three, also, stop the saponification of fats to some extent. Again, my own use of 80 grains of boracic per day for four years in the malt food for typhoid shows that, in adults at any rate, the gastro-intestinal effects are certainly not those described by Dr. Henry, as due to the ingestion of the preservative. The other alternative is pasteurisation. Heating the milk for 20-30 minutes to 68° C. is said to destroy 95 per cent. of the total number of organisms. It would not have much effect on saccharification, would precipitate a few albuminoids, and might make the cream more assimilable, by bursting some of the cream cells. But it also destroys the lactic acid type of bacteria, and allows the poisonous butyric germs to assume the upper hand without sourness or apparent change. We are thus driven to the conclusion that "there is at present no practicable and certain method of freeing milk on a large scale from germs without seriously prejudicing its nutritive value." And the best outcome of any discussion such as the present, in my opinion, lies in the direction of the following recommendations:—

1. Wherever possible, milk should be obtained straight from the healthy cow.
2. All dairy herds should be under veterinary inspection, and tested with tuberculin.
3. Their sanitary condition should be approved, the rules for clean milking circulated and enforced, the milking and sheds inspected at unexpected times, and disqualification follow persistent neglect.
4. Refrigeration and rapid transit should receive municipal and parliamentary attention.
5. Cool storage, scalding on delivery, and general cleanliness in the house should be inculcated on all householders.
6. Pasteurisation should be encouraged and inspected, and the use of preservatives placed on a recognised and scientific footing.

As regards butter, it was certain that larger quantities still of preservatives are employed, though the effects on nutrition will be less serious, and the consumers being older, are far less likely to be seriously injured. And it was also certain that the superiority of pasteurised and sterilised cream is unquestionable, and the advantages of artificially "souring" the cream by pure cultures of selected lactic acid germs so numerous and important that its general adoption is only a question of time.

Dr. HENRY raised the point of order that Dr. Springthorpe was taking the question outside the proper limits of discussion.

The PRESIDENT ruled against Dr. Henry.

Dr. OFFICER gave instances where very large quantities of boracic acid had been ingested without any

injurious effects. The case against boracic was generally much overstated.

Dr. BRETT quoted the instance of two calves at the Calf Lymph Depot that had died, in his opinion, from the effects of boracic in their food. He could not say what quantity had been taken.

Dr. HALL OWEN, from a comparison of town and country milk, was practically sure that boracic acid produced diarrhoea and muco-enteritis.

Dr. HOWARD dwelt upon the great importance of the question, commercially as well as medically. Sweeping assertions should be very sparingly made. He considered it non-proven that small doses of preservatives, even for a long period, were necessarily deleterious. It was a question of dose and of time. No scientific evidence had been adduced against cautious use. It was a question whether the addition did not often make the milk less injurious. He would suggest that scientific experiments should be made to settle what amount might be taken with impunity.

Dr. CHERRY, at the request of the Chairman, joined in the discussion. (To appear in our next issue.)

The PRESIDENT endorsed the importance of the question, and the difficulty of practically settling it. Continuous additions by fresh people made the problem still more complex.

Dr. HENRY replied. He would have liked to have confined the discussion simply to the question of preservatives. He did not consider the commercial aspect of the case. He maintained that his paper gave scientific evidence as to the actual ill effects produced by boracic acid.

Dr. SPRINGTHORPE then read his paper, "Notes on Typhoid," which will appear in next issue.

The PRESIDENT thanked Dr. Cherry for his interesting remarks, and declared the discussion of the paper adjourned to the next meeting.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

The regular monthly meeting of the Branch was held at the Royal Society's Room, Sydney, on Friday, 26th May, 1899—Dr. E. T. Thring, President (in the chair). There were also present: Drs. Nash, Tidswell, Traill, Gordon MacLeod, Manning, Sinclair, Hankins, Spencer, Goode, Mills, F. H. Quaife, Flynn, W. S. Brown, Crago, West, J. Parker, Gordon Craig, Barrington, Clark, Walker-Smith, G. A. Marshall, J. A. Dick, A'Beckett McCarthy, G. Armstrong, Morgan Martin, F. W. Hall, Gledden, Bennet, Worrall, Macdonald Gill, S. H. Hughes, O'Hara, W. Ohisholm, Bucknell, Ashburton Thompson, Taylor Young, C. Read, R. H. Jones, Stokes, O'Gorman Hughes, Guy Warren, and Oosh. Visitors: Dr. George Allan, Dr. Levy.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the election of the following gentlemen as members of the Branch:—Dr. H. G. Bennetts, Temora; Dr. Thos. Davies, Millthorpe; Dr. R. H. Jones, Sydney; Dr. J. P. Hocken, West Wallsend.

Dr. SPENCER read a paper on "The Epidemics of 1898," which will appear in a future issue.

Dr. TIDSWELL said he could not discuss the paper from a clinical point of view. There was one point, however, he would like to mention: In February, 1898, he examined three ships, and on each occasion he found on board cases of German measles. This importation might throw some light upon the epidemic

of 1898. The incident occurred in the early part of the year, and might possibly have some bearing upon the commencement of the epidemic.

Dr. NASH said he thought the epidemic of 1898 less severe in Newcastle than the epidemics of 1895 and 1898. It was really thought at the time that almost every person had been attacked, and the fact remains that the epidemic of 1898 was principally in children under four years of age. With regard to this matter, the question arose as to whether the public schools should be closed. In some districts they were, but in the Newcastle district they were not.

Dr. NORTON MANNING read a paper on "The Immediate and Ultimate Treatment of the Inebriate." (See page 221.)

Dr. CRAGO said no apology was necessary from Dr. Manning for bringing such an important subject before the Branch in such an able manner. He (Dr. Crago) had been associated with some of the efforts that had been made to reclaim the drunkard—as Echo Farm for men, and the Church Rescue Home for women. He was glad to hear that Dr. Manning advocated the immediate withdrawal of all alcoholic liquors, as that had always been his practice. At Echo Farm—afterwards known as Rest Haven—the treatment had very nearly complied with that recommended by Dr. Manning, having consisted of light work—such as gardening, etc.—in the open air in a secluded spot (Middle Harbour) surrounded by beautiful scenery, aided by moral and religious influences. About 80 per cent of the cases treated there could be classed as "cures." He regretted to say that the success amongst female inebriates was very much less—in fact almost disheartening—as after a residence in the home for 12 months or even two years they have been known to get drunk on the very first day of leaving the home. However, he was satisfied that the scheme outlined by Dr. Manning consisting of restraint in a properly equipped home, combined with light occupation and moral and physical training offered the best chance of reclaiming the drunkard.

Dr. WEST said there was certainly wanted in Sydney a place where a patient could be sent who was suffering from the result of drink. Many will not go to the Reception House, then what was to be done with them? If left at home in many cases where drugs were ordered they were taken in excess or not at all. He remembered a case he had lately under his control, where the patient had been tried in two nurses' homes, but owing to his violent behaviour had been compelled to leave. There could be no question that the suggestion of Dr. Manning with regard to the establishment of a proper place in which inebriates could be treated was an excellent one, and should be carried out at once, if not by the Government then by private enterprise.

Dr. ASHBURTON THOMPSON asked what was meant by an inebriate?

Dr. MANNING replied that an inebriate was one who suffered physically, morally, or mentally from alcohol taken in excess.

Dr. THRING said that he had to thank Dr. Manning for his interesting paper, which took up the attention at once. He had had a good deal to do with inebriates, and was satisfied as to the absolute futility of trying to break down the habit. He was glad to hear Dr. Manning's statement with regard to stopping the drink at once. His (Dr. Thring's) experience quite agreed with that. He should like to have heard Dr. Manning's criticism of Dr. Creed's bill, which was without doubt a step in the right direction, but how far did the bill go in the proper treatment of the inebriate?

Dr. West's suggestion for private individuals to take up this work would hardly do, as there was no control; it would be very like the law without the policeman.

Dr. CHISHOLM was sure that all medical men had seen but too many of such distressing cases. The legal aspect of the matter deserved consideration. A man rendered furious by drink might become a terror to his whole household, and yet the police were powerless to interfere prior to a homicidal attack being committed on those about him.

Dr. QUARFÉ inquired whether Dr. Manning had tried the effect of hot or cold wet packs on such patients. The stopping of all alcohol was the correct immediate treatment, and he had never seen any ill effects from this course, though the general public seemed to have imbibed the idea that such treatment was dangerous. He favoured the use of ammon. bromide, owing to its stimulating character.

Dr. TAYLOR YOUNG asked if the question of committal was dealt with in Dr. Creed's bill.

Dr. MILLS mentioned the fact that Professor Waller stated that there was a distinct advantage in the use of bromide of potassium over that of the other bases—as the potassium possesses a certain sedative action of its own.

Dr. GOODE testified to the excellence of Dr. Manning's paper. He made some distinction between the inebriate who drank hard at times but had self-imposed intervals of sobriety and the habitual drunkard who indulged as incessantly as his means or his physical powers would permit.

Dr. MANNING, in reply, begged to thank the members for the kind reception accorded to his paper. With regard to Dr. Creed's bill he could not fully discuss it without having it before him. There was much in it which was admirable. He would strongly advise no private individual to undertake to provide an institution for the treatment of the inebriate. From personal experience he was convinced any such attempt to deal with the evil would result in failure. He had not tried the wet pack method, having been satisfied with the result of doses of bromide and chloral. In answer to Dr. Taylor Young, there was provision in Dr. Creed's bill for committal.

Dr. NASH exhibited specimens of (a) a kidney with attached cysts and contents; (b) a multilocular ovarian cyst; (c) gall stones from gall bladder and cystic duct.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE monthly meeting of the Branch was held at the University on May 26th, 1899. Present: The Vice-President (Dr. Humphrey Marten) in the chair, Drs. Gault, J. A. G. Hamilton, Goode, Chapple, Poulton, Todd, Harrold, London, Morgan, Michie, Symons, T. K. Hamilton, Corbin, Lawrence, Cavanagh-Mainwaring, Gunson, and the Hon. Secretary (Dr. W. T. Hayward)—Drs. Archer and Benham as visitors.

The PRESIDENT apologised for his absence.

Dr. T. K. HAMILTON exhibited the following cases:—

No. 1. *Congenital Irregularity in the Development of the Iris*.—A. C., aged 14 years, born with an incomplete iris of the left eye. At the first glance there would seem to be a defect of the whole iris, for the back-ground of the gap presents the same dark appearance as the pupil, but on closer examination such is found not to be the case. There is an irregularly-shaped defect of the anterior or uveal portion of the iris, which extends from the pupil upwards and slightly outwards to within 2 m.m. of the outer margin

of the ciliary zone. In shape this defect is somewhat triangular, having its apex at the pupil margin. The base measures about 7 m.m., and has two cornua, one at each angle, while its apex is represented by a break in the pupil margin of about 2.50 m.m. The posterior limiting membrane and the pigmented retinal layer of the iris form the dark back-ground of the gap. The pupil acts well every way, and dilates fully and uniformly to atropine. The eye is otherwise, including the refraction and vision, normal. The action of the pupil demonstrates clinically the anatomical fact that the dilator of the pupil is to be found in the retinal layer of the iris, and that it can act quite independently of the uveal portion of the same.

No. II. *Apparent Loss of Motion of the Right Eye outwards and of the Left inwards.*—N. H., aged 15 years, had an attack of rheumatism four years ago, succeeded in the following year by chorea, which lasted for twelve months. Lately a peculiar appearance of the eyes and inability to turn them in certain directions has been noticed. Examination revealed the following conditions:—The left eye apparently diverges about 2° when she looks at the distance, and there is then no movement of the right outwards nor of the left inwards to be obtained in either eye. The commissure of the lids is narrower in the left eye than in the right, but there is no ptosis on this side, nor are any of the other muscles supplied by the oculo-motor involved. When she accommodates for near vision, both eyes converge equally and both pupils also act equally to accommodation as well as consensually and to direct light. Her positive converging power = 10 metre-angles, and not only is this power normal, but it can be exceptionally well maintained, for she can readily fuse the two images vertically of small type (Snellen 0.50D. reading) which a 8° prism base downwards makes, and can apparently go on doing this indefinitely. The powers of adduction and abduction are also normal, viz., 26° or more and 8° respectively, but examination of the muscles during repose, i.e., at a distance of 6 m. reveals an exophoria for the correctness of which—in order to restore the visual axes to a state of parallelism—a prism of 12° is required. Sometimes there is a vertical deviation showing a hyperphoria of 2° on the right side, but this is not constant, as examination on different occasions failed to bring it out every time.

Vision R. § (nearly) with 0.50D ax. 120° §

L. § (nearly) with 0.50D = 0.50D ax. 120° §
J. I. at 22 c.m. (both).

She has binocular vision, and uses it both for distance and near, but, strange to say, although the axes are manifestly not parallel, she does not seem to have diplopia, or, at any rate, will not admit that she has. No efforts with or without prisms succeed in making her turn the eyes in the directions towards which they do not move except in the left, as before stated, when she accommodates, and even after having been put under the influence of a general anæsthetic movements of these apparently inactive muscles could not be obtained. The case is a peculiar one. That one muscle alone of those supplied by the third nerve should be capable of remaining inactive to the stimulus which the effort to get and maintain binocular vision for distance excites, taking on, as it were, a kind of conjugate action with the external rectus of the other eye, and that the same muscle should respond readily to the stimulus of accommodation and maintain its actions so well in this direction is, to say the least of it, a most unusual condition of affairs. The only explanation or way of reconciling such irregular clinical phenomena is to assume that there is some

irregularity of the nervous impulse supplying the two eyes at work, causing conditions which we are wont, for want of a better name, to call hysterical, and the very erratic character of the signs, taken along with the patient's previous history, seems to point to this as the only, but, nevertheless, scarcely unsatisfactory explanation of the case.

No. III. *Insertion of a Perforated Silver Sphere into Tenon's Capsule.*—G. R., aged 15, eyeball enucleated for injury. A perforated silver sphere was inserted in Tenon's capsule and the principle of advancement, or rather the avoidance of retraction of the muscles of the globe, as recommended by Barrett* (Melbourne), was adopted. Fox† (Philadelphia) has been using silver spheres instead of glass in these implantation operations, but the idea of perforating the spheres seems to have been originated by Bryant‡ (Omaha), who has been using fenestrated spheres made of aluminium. The object of the fenestration is to allow of the sphere becoming more fixed to its surroundings than the ordinary sphere of glass could be. The granulations and other tissues surrounding the sphere fill up its interstices, and new connective tissue is formed therefrom. This has been found by Bryant to make a more solid stump and aid materially in preventing subsequent extrusion of the sphere. The complete fixation which perforation of the sphere seems to secure also manifestly insures more regular action of the muscles stretched on its surface, and in this way increases and regulates their respective movements. The case now exhibited shows a most satisfactory result. The prothesis—which was fitted in three weeks after the enucleation—moves well, the excursions being as follows:—Inwards 30°, outwards 15°, upwards 20°, and downwards 30°. There is a good solid stump behind it, and the upper lid stands out as well as that of its fellow on the opposite side.

No. IV. *Anterior and Posterior Cortical Congenital Cataract in Father and Daughter.* (a) *Father's Case.*—C. R., aged 42 years, first seen on Feb. 22nd of this year. History of vision failing since fourteen years of age, until now, he is almost blind of the right and completely blind of the left eye. The immature lens of the right eye presented the following appearances:—There was a central pin-point opacity, almost anterior and surrounding it several small sectors on a deeper plane. The posterior was occupied also by a small central thick opacity surrounded by a zone of fairly thick density, and beyond this to the periphery there was a complete zone of sector-like striæ. The left lens was uniformly opaque and of whitish colour. On March 23rd a simple extraction was performed on left side, and the nucleus was found to represent only about $\frac{1}{2}$ of the lens, the remainder being made up of a soft cortical mass. The vision now is—

With + 7.00D. = + 4.00D. ax. 10° § (nearly).

With + 12.00D. = + 4.00D. ax. 10° J. I. at 30 c.m.

(b) *Daughter's Case.*—C. M., aged 15 years. Four years ago vision began to be impaired, and has gradually become worse, so that now she has on right side only fingers close up and the left is blind. The immature right lens presented appearances almost exactly the same as that of her father's eye, described above, and the other eye had evidently passed through the same process of development in coming to maturity. On April 7th the left lens was needed, and the vision now is:—

With + 11.00D. = + 1.00D. ax. 100° §

With + 16D = + 1.00C. ax. 100° J. I. at 22 c.m.

* "Intercol. M. J. of Australia," vol. III.

† "Arch. Ophthal.," vol. xxvii, p. 667.

‡ "Ophthal. Record," vol. vii, p. 427.

May 7th. The other lens was needed. On enquiry it seems there is still another member of the family becoming blind, a daughter, aged 13 years, whose vision is gradually going just as her sister's went. Congenital cataract as a family affection is now well-recognised, and is of fairly frequent occurrence. Hirschberg has recently reported this condition in five different families.* That the cataract was congenital in these two cases may be assumed, for the observations of authorities go to prove that such is the usual thing, but neither of these two patients seems to have been aware of its existence until the vision became seriously impaired on approaching puberty. Panas says when this particular formation of cataract is found in parent and child, it exists as a congenital condition.†

No. V. *Laryngeal and Tracheal Oedema*.—D. J., female, aged 17 years. Has advanced atrophy of both nostrils and crusts of discharge covering the whole of the mucous membranes of both nose and naso-pharynx with marked shrinkage of adenoid tissue all throughout. Thick dried crusts were also found in both ventricles of larynx, and lining the tracheal walls as far down as could be seen. Luc† states that this condition is not so rare a clinical occurrence as it is said to be. He found it in 15 per cent. of his cases, but my experience leads me to think it is not nearly so frequently to be seen as that. He also found that the crusts are primarily developed in the larynx and trachea, and do not descend from the nasal cavities. My observations in this and other cases go to prove the correctness of this statement, for even when the nose is kept entirely free from crusts and discharge by thorough treatment, still, if left alone, the crusts keep on forming in the passages lower down as rapidly as before anything is done for the nose. In this case the daily application of 80 per cent. solution of sulpho-ricinate of phenol and injections of menthol and guaiacol in liquid alboline seemed to have improved the condition considerably.

Minutes of last meeting read and confirmed.

The SECRETARY read a letter from the Secretary of the Central Board of Health, in reply to the resolution re the Health Act, passed at the last meeting of the Branch.

Dr. MARTEN read his paper on "The Open Air Treatment of Consumption." (See page 235.)

Dr. GAULT read his paper on "Experiences at a Home for Consumptives." (See page 239.)

An interesting discussion ensued, in which Drs. Benham, London, Goode, J. A. G. Hamilton, Harrold, and Hayward took part. Drs. Marten and Gault replied.

On the proposition of Dr. J. A. G. HAMILTON, seconded by Dr. TODD, it was decided to request the Council to appoint a Committee to consider the question of what steps, if any, should be taken to facilitate the more efficient treatment of consumptives.

* "Centralbl. f. Augenheilk," xxi., p. 264.

† "Maladies des Yeux," vol. I., p. 554.

‡ "Journ. of L. Laryngol.," vol. III., p. I.

ALL SPEECH DEFECTS CORRECTED.

SPEECH AND LIP-READING FOR THE DEAF.

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NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MINUTES OF COUNCIL MEETING HELD AT WELLINGTON, MAY 19TH, 1899.

Present.—Dr. Fell (in the chair), Dr. Cahill, Dr. Fyffe (Otago), and Dr. Graham Campbell (General Secretary).

Minutes.—The Minutes of last meeting, held in Auckland, on January 4th, were read and confirmed.

CORRESPONDENCE.

From Dr. Brown (Dunedin), in reply to letter re Hagey Institute.

From the Colonial Secretary, enclosing pamphlets from the Rt. Hon. Joseph Chamberlain re Tropical School of Medicine and "How to Collect Mosquitoes."

From Dr. Naylor (Auckland), complaining of aspersions on his character alleged to have been made by a member of the profession. Also from Dr. Lindsay and Dr. Scott on the same subject.

Resolved.—"That this Council cannot see its way to take any action in the matter, having regard to the fact that Dr. Lindsay has made ample apology for any remarks he may have made in error."

From the Minister of Justice, enclosing report of inquest held at Karangahake, on the 11th April, on the body of Joseph Baxter Green, a child three years of age, and drawing special attention to the following rider added to the verdict by the Jury:—"That the attention of the authorities be called to the conduct of Dr. Buckley in refusing a certificate of death after having been in attendance several days—his reason apparently being to extort the payment of his account for medical attendance." A letter was received on the subject from Dr. Buckley explaining the circumstances and stating that his reason for refusing the death certificate was due to the fact that Dr. Forbes had been attending the case.

Resolved.—"That the Minister of Justice be informed that from the evidence the Council is of opinion that Dr. Buckley was quite within his rights in declining to give the certificate, owing to the fact that he was not the last medical attendant to see the patient alive."

From the British Medical Association, in reply to letter from the General Secretary, stating:—"With regard to the motion proposed by the Victorian Branch, I have to inform you that a resolution was passed by the Council at their meeting on January 18th last, approving the suggestion, and in future any applicant for membership resident in a colony in which there is a Branch of the British Medical Association will not be elected until his or her name has been submitted to the Branch for report."

From Dr. Jennings (Christchurch), suggesting that the Council should consider the question of Examiners' fees at the Medical Examinations, which at present are not sufficient to cover the expenses of Examiners, including the cost of a *locum tenens*.

Resolved.—"That the General Secretary inform the Chancellor of the University that some members of the profession desire to ascertain whether they are entitled to include in their expenses the cost of employing a *locum tenens*."

Accounts.—Sundry accounts amounting to £4 3s. 6d. were passed for payment, also the expenses in connection with the Annual Meeting at Auckland (£11 5s. 6d.) which the Secretary was instructed to allocate to the different Sections.

Confirmation of By-Laws.—A letter having been received from the General Secretary of the London Council notifying that the By-Laws as amended by the New Zealand Branch in June last had been approved, it was resolved "That the By-Laws as amended be printed and circulated."

Parliamentary Secretary. *Resolved*,—"That the appointment of Dr. Mason as Parliamentary Secretary, made in Auckland at the last Annual Meeting, be confirmed."

Chairman of Council. *Resolved*,—"That Dr. Fell remain in office until the Annual Meeting, to be held in 1900."

New Zealand Medical Journal.—Motion by Nelson Section: "That the Association at present existing between the New Zealand Branch of the British Medical Association and the *Australasian Medical Gazette* be dissolved, and that the *New Zealand Medical Journal* be resuscitated." The General Secretary placed before the Council the result of his inquiries into the matter.

After discussion, during which it was elicited that Auckland and Wellington were opposed to the motion, Christchurch approved of it, while Otago desired the matter to be left over until the next Annual Meeting, it was resolved,—"That the Nelson Section be informed that in the absence of any particulars with regard to the cost of the proposed Journal, the Council cannot see its way to do anything in the matter until next Annual Meeting."

Auditors.—Dr. Thomas and Dr. Manning were re-appointed Auditors for the ensuing year.

New Members.—The following candidates were admitted as members of the Association:—

Brown, G. P. (Dunedin)	Bull, S. A. (Coromandel)
Cairns, W. (Warkworth)	Crookes, T. L. (Christchurch)
Forbes, F. C. S. (Paeroa)	Owen, H. E. (Picton)
O'Neill, E. J. (Dunedin)	Porter, A. H. (Waihi)
Burt, D. J. (Dunedin)	Macdonald, W. M. (Dunedin)
Hay, F. (Dunedin)	Scott, J. H. (Dunedin)

Hawkes Bay Section. *Resolved*,—"That members in Napier and Gisborne be permitted the option of joining either the Auckland or Wellington Branch."

Report of Parliamentary Secretary.—"I beg to make the following report:—At your Meeting in Auckland no fresh task was set me, and in the interim nothing has cropped up."

The question of a Bacteriological laboratory, has as you are aware, been satisfactorily disposed of. The Government has agreed to allow Mr. Gilruth to examine any tissues or fluids sent him by any duly qualified medical man.

I have, in conjunction with Mr. Gilruth, drawn up a set of tables and instructions which will be issued to all medical men applying for them.

I have asked, and the following gentlemen have consented to act as custodians and distributors of the various sera, etc., for the several districts which they represent:—Auckland, Dr. Makgill; Nelson, Dr. Talbot; Blenheim, Dr. Cleghorn; Christchurch, Dr. Fox; Dunedin Dr. Roberts.

As soon as the Session opens I will again urge upon the Government the desirability of putting the Medical Registration Act upon the statute book.

I would respectfully suggest that the Council urge upon the various County Councils the necessity of appointing a Medical Officer of Health for each district. Were that done, and regular reports made, the health or unhealth of the whole colony could be seen at a glance. One part would be apprised of the presence of any infective disease in the neighbouring part, and

effective measures could be taken to prevent its introduction and spread.

If the Council see fit I will draw up a circular letter which could be sent to all the Chairmen.

I am, yours faithfully,

J. MALCOLM MASON.

This report arrived too late for discussion by the Council.

WELLINGTON SECTION.

A MEETING of the above Section was held on May 5th, 1899. Dr. Martindale Kendall was elected a member.

A Balance Sheet was presented which shewed that after all liabilities in connection with the last general meeting were discharged, a small credit balance remained in hand. A long discussion took place on the subject of milk and dairy inspection, a question which is at present occupying the attention of the City Council and a large section of the Wellington public.

The Government has recently secured the services of six English veterinary surgeons, and these gentlemen having just landed in Wellington, the question has arisen whether the whole supervision of the dairies is to pass into their hands or not.

It was resolved "That this meeting is of opinion that the sanitary inspection of dairies and their surroundings should come within the province of the department of the Medical Officer of Health, and that the inspection of cattle be under the charge of the veterinary department."

An interesting case suggestive of acromegaly was shewn by Dr. Young. An election of officers for the ensuing year resulted as follows:—President, Dr. Cahill; Vice-President, Dr. Anson; Hon. Sec. and Treasurer, Dr. Martindale Kendall; Local Editor, Dr. Fell.

OTAGO SECTION.

MEETING held March 29th, 1899. Present: Dr. Barnett (chair), Drs. Colquhoun, Batchelor, Davies, De Lantour, Hocken, McKellar, Roberts, Smith, Siedeberg, Marshall, McDonald, G. P. Brown, and O'Neill.

The SECRETARY reported that the Defence Committee had communicated with "Dr." Commins, an evangelist who, it was alleged, practised as a doctor of medicine, though unqualified, and that Dr. Commins had given his assurance that he practised only amongst the poor and charged nothing for his advice, although he did charge for medicine supplied. Dr. Commins laid claim to unusual healing power by virtue of his electro-vitality.

The Bi-chloride of Gold Institute, recently established in Dunedin, was referred to, and members were warned to be very careful about giving any support to the institution.

Dr. DE LANTOUR gave an interesting demonstration of a method of so using the X-rays as to indicate very precisely the depth to which a foreign body was embedded in the tissues. He also exhibited a number of X-ray photographs which he had taken.

Dr. BARNETT read a paper on "Ligatures and Sutures," describing first the history of the ligature, then giving an account of the various materials used, the mode of manufacture, the recognised methods of sterilization, and other facts bearing on the practical uses of silk, silk-worm gut, cat-gut, kangaroo tendon, and horse hair. Dr. Barnett dealt particularly with the subject of cat-gut, pointing out the unreliability of much that was sold as aseptic cat-gut, and laying stress on the careful attention to detail necessary for the efficient sterilization of this material. Dr. Barnett

thought it risky to use silk except in the finer sizes for ligatures that have to be placed close under the skin, as in hernia operations, or abdominal incisions. A ligature sinus occasionally results if thick silk be used, although it may have been thoroughly sterilized.

The paper was discussed by several members, who gave their personal experiences with various suture materials.

Meeting held April 26th, 1899. Present: Dr. Barnett (chair), Drs. Batchelor, G. P. Brown, Wm. Brown, Colquhoun, Davies, De Lantour, Truby-King, Siedeberg, McKellar, O'Neill, Riley, and Roberts. Visitors: Dr. Mary Cowen and Dr. W. C. MacKnight. The agenda paper for the next council meeting was laid before the meeting. It was agreed that should the matter of resuscitation of the *New Zealand Medical Journal* come up for discussion our delegate be instructed to vote that the question be postponed until the annual general meeting.

Dr. BATCHELOR proposed, in accordance with notice previously given, "That the subscription of town members of the Otago Section be 10s. per annum in addition to the present subscription." Seconded by Dr. COLQUHOUN, and carried unanimously.

Professor J. H. Scott was recommended for affiliation to the Otago Section.

Dr. COLQUHOUN then read a very interesting and valuable paper on "The Therapeutics of Phthisis," describing the various treatments that from time to time have been recommended, by drugs such as creosote and its allies, by anti-toxins or the like, such as Koch's tuberculin, and by dietetic and hygienic means, such as that now extensively adopted and known as the Nordrach or the open-air treatment of consumption. Dr. Colquhoun strongly advocated the last-named method, quoted most encouraging cases from magazines and from his own practice, and emphasized the fact that it is not necessary to send patients away from their homes in every instance. Much may be done by careful attention to detail at home.

Dr. ROBERTS said although the pathology of the disease was now very well known the treatment had not advanced at the same rate, and he explained the difficulty of getting drugs actually in contact with the bacilli. The open-air method undoubtedly was the most rational.

Dr. WM. BROWN spoke of the early settlers who came out here with phthisis being cured by the open-air treatment which was forced upon them by stress of circumstances. Medical men in sending patients away to so-called health-resorts should be careful to ascertain whether the accommodation provided was suitable. In many country places the sanitary arrangements were abominable. Dr. Brown aptly described Dr. Colquhoun's paper as a most nourishing one.

Dr. TRUBY-KING discussed the subject from the broad point of view of comparative pathology and therapeutics. He showed how plants and animals are influenced by unnatural or unsuitable surroundings. He considered that the life of patients in a properly-constituted lunatic asylum should be regulated on the same lines as laid down for the open-air treatment of tuberculosis.

Dr. BATCHELOR thought drugs must not be discarded altogether. Where complications exist drugs may be most useful.

Dr. RILEY suggested that the Government should be approached with the object of getting sanatoria for consumptives erected, and it was decided to refer this matter to the New Zealand Branch for consideration at the next annual meeting.

PROCEEDINGS OF OTHER SOCIETIES.

ROYAL SOCIETY OF NEW SOUTH WALES, MEDICAL SECTION.

ANNUAL MEETING.

A SPECIAL meeting for the election of officers was held at the Royal Society's House, 5 Elizabeth-street N., on Friday, May 19th, at 8 p.m. In the absence of the chairman of the Section, it was decided that Dr. W. H. Goode take the chair. The following were elected officers of the Section for the session 1899:—Chairman, Dr. Walter Spencer; Committee, Drs. F. H. Quaife, S. Jamieson, L. E. F. Neill, R. J. Pope; Hon. Secretaries, Drs. J. Adam Dick, Frank Tidswell.

A vote of thanks to the retiring officers terminated the proceedings.

FIRST GENERAL MEETING.

The first general meeting of the Medical Section for 1899 took place immediately after the close of the above special meeting for the election of officers. Dr. Walter Spencer, the chairman of the Section, presided. There was a fair attendance of members present. The minutes of the preceding meeting were adopted.

EXHIBITS.

Numerous specimens from the recent additions to the University Museum of Normal and Morbid Anatomy were exhibited by the curator, Dr. Sydney Jamieson.

Several new pieces of useful and ingenious laboratory apparatus were exhibited by Dr. Frank Tidswell, amongst which were improved section-cutters and centrifugal machines. Dr. Tidswell explained the exhibits.

PAPER READ.

A paper was read by Dr. Walter Spencer entitled: "An Outbreak of Dermatitis Exfoliativa Neonatorum." The reading of the paper occupied about thirty minutes, during which Dr. W. H. Goode occupied the chair. The paper, by consent of the Council of the Royal Society, is published in the *Australasian Medical Gazette*, vide page 225 of this issue. Several of the members present discussed the subject, viz., Drs. Goode, Chisholm, Tidswell, etc.

DEMONSTRATION.

A demonstration upon "Tick Fever" was given by Dr. Frank Tidswell, who illustrated his remarks by numerous specimens. At the conclusion of the demonstration several members discussed the subject, including Drs. W. H. Goode, Sydney Jamieson, and others.

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Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

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THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.:
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
E. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A.; AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH JUNE, 1899.

EDITORIALS.

THE VITAL STATISTICS OF NEW SOUTH WALES.

THE Government Statistician for New South Wales has just published the Fifth Part of the Statistical Register for 1898. On glancing through the columns of figures which it contains, one is confronted with problems of serious import. For instance, the number of

births registered in the colony during the year was 36,222—the lowest number recorded since the year 1885, when the population was estimated as 407,575 less. This means a reduction in the birth rate from 37·79 to 27·13 per thousand living, in fourteen years. Should this rate continue to decrease in like proportion, New South Wales will eventually emulate France in its weakened, nerveless people. But though the birth rate decreases, the illegitimate rate increases, and now stands at 6·93 per hundred births. In Sydney and suburbs the illegitimate birth rate is 10·35 per hundred births! Then, too, the marriage rate has decreased from 8·22 per thousand of the population in 1885 to 6·66 per thousand in 1898. This will not, however, account for the remarkable lowering of the birth rate. No less than 230 marriages were dissolved (decree nisi made absolute) during the year, and 139 divorced persons were remarried.

Turning, on the other hand, to the death rates, we find that although the rate for the year (12·47 per thousand of population) was slightly in excess of that for the previous four years, it was about equal to the mean death rate for the last ten years. Over 37 per cent. of the deaths were those of children under five years of age, and 26·51 per cent. were under one year. The death rate for children under one year (121·9 per thousand births) was the highest since 1889.

What conclusions, then, must we draw from these figures? Our death rate remains practically stationary; our birth rate is falling fast. Over 12 per cent. of infants die before reaching the end of their first year of life. "The rate of illegitimacy," says Mr. Coghlan in his *Wealth and Progress of N.S.W.*, 1896-7, "in New South Wales is higher than in any of the other Australasian colonies, higher than the general rate of the United Kingdom, higher than in England, Wales, and Ireland, but lower than in Scotland and in most of the continental countries of Europe. Moreover, illegitimacy in New South Wales is increasing, while in the United Kingdom it is decreasing." In speaking of the illegitimate rates Mr. Coghlan remarks, "These figures throw a strong side light on the morals of the community."

Again, in referring to the death rate of illegitimates, the same authority says: "While the death rate of all children (in 1896) under one year of age was 121·49 per thousand, and of all children under five years of age 31·34 per thousand, the death rate of legitimate children of less than twelve months was 109·13

per thousand, and of legitimate children under five years of age 28.34 per thousand, and the death rate of illegitimates under twelve months of age was 293.66 per thousand, and under five years of age 92.27 per thousand. These figures disclose the fact that the death rate of illegitimates under one year is 169.09 per cent. higher than of legitimates, and that the death rate of illegitimates under five years is 225.58 per cent. higher than that of legitimates. In other words, the probability of a legitimate child in New South Wales reaching the age of five years is about three times greater than that of an illegitimate child."

Why, in the face of this, do we shut our eyes to the fact that the abortionist and the baby farmer are abroad in our midst? How many of our newspapers are free from the advertisement of the "specialist" who "removes obstructions," the quack who vends pills and potions "guaranteed to restore regularity," and the "kind lady" who adopts babies from birth? Why do not our legislators introduce a measure to put down such advertisements as the following?

LADIES—My New Triple Power Female Pills restore regularity instantly. Box, posted, 6s. 6d. Write _____

LADIES—Write for Free Particulars how to Restore Regularity Easily at Home yourselves without medicine. Mr. _____

The public, knowing all these things, look on calmly and say, "we cannot make people moral by Act of Parliament." We can, however, prevent the dissemination of pernicious and indecent literature, more especially through the medium of our newspapers, and thus the cause of the first downfall of our youth will be prevented. Is New South Wales destined to become another France and the scorn of the civilised world? *Quien sabe?*

DISPOSAL OF CITY OF SYDNEY GARBAGE.

THE Committee of the Sydney City Council, appointed to enquire into and report upon the best method of disposing of city refuse, brought up its report on May 30. The evidence taken disclosed four distinct proposals, viz.:—1. Burial by mixing and covering with soil or sand. 2. Burning by means of destructors. 3. Treatment by steam, extracting grease and manurial products. 4. Towage to sea. At present the system adopted in Sydney is to collect the refuse in carts and deposit it on a portion of land near Mount Rennie, Moore Park. The annual cost for street cleansing, collection and

deposit of refuse, is estimated at about £35,000. The committee made the following recommendations:—1. That, in view of the gradual increase of population, and its extension on all available areas in the city, it is essential that all refuse and garbage should be absolutely destroyed. 2. That the most effective system of destruction of refuse is by fire. 3. That, whatever may be the method of destruction finally approved, provision shall be made for prohibiting picking and sorting, unless such material intended for removal is specially disinfected. 4. Your committee do not recommend the adoption at this juncture of any particular class of destructor, but would advise that a specification of requirements be drawn and submitted to general competition. 5. That a disinfecting chamber be provided and worked in connection with every garbage destructor erected.

The first proposal laid before the committee during its deliberations emanated from Professor Anderson Stuart, who recommended burial by mixing and covering with sand or soil. It was claimed for this system that the garbage is speedily rendered innocuous by the action of specific organisms with which the earth is richly furnished, while, at the same time, a valuable quality is added to the soil thus treated. Acting on Professor Stuart's suggestion, the mayor and aldermen of the city paid a visit to the tip at Moore Park on February 6, when he illustrated his method. The corporation labourers laid down a quantity of garbage which was covered with sand, after which it was raked over to allow of the sand mixing with any offensive matter. As this trial took place four months ago, it would be interesting to learn the result. We do not know of any large city in the world where this system—that is, mixing the garbage with sand—is carried out successfully, and we are therefore totally opposed to it as unscientific, and dangerous to the health of the community.

The method of destruction by steam treatment claims to deal with refuse for the extraction of grease, transforming the residue into a valuable manure. This method is said to be in vogue in New York, Boston and Philadelphia. It provides for picking and sorting, in which there is a certain amount of danger to those concerned.

Towage to sea is the system practised in many parts of the world, e.g., in Liverpool, Eng. The disadvantage of this method is that the lighter descriptions of material float upon the water and are washed ashore to create a nuisance. This has been experienced in England,

and many complaints have been made of refuse having been washed on to the Welsh coast. Further, in bad weather the vessels cannot go to sea, and the result is an accumulation of refuse on the wharves and jetties which is afterwards difficult to remove.

The committee, bearing in mind the fatal objections to the above methods, decided—and we think rightly—that destruction by fire was the only trustworthy system. Unfortunately, the evidence as to the best type of destructor was incomplete. The Pinhoe, Engle, Beaman-Deas, Leveson (No. 2), Biddle's, Guest's, Horsfall, Warner, Bennett-Phythian, Meldrum, were all put forward as excellent destructors, though in Dr. Ashburton Thompson's opinion the Beaman-Deas was superior to the others. Many of these are undoubtedly excellent types of destructors, but the Council will act wisely in delaying their final decision with regard to the class of cremator to be erected. Most of the above have some faults which may only show on working for some time, but nevertheless they are faults which militate against their success.

THE TREATMENT OF INEBRIATES.

A SUBJECT of very great importance to the well-being of the community was brought before the New South Wales Branch of the British Medical Association at its last meeting by Dr. F. Norton Manning, in an able and exhaustive paper on the treatment of the inebriate. (See page 221). Probably no one in Australia is better qualified than Dr. Manning—from his long experience as Inspector General of the Insane in New South Wales—to speak with authority on this subject. It is more particularly to the second part of the paper—the ultimate treatment—that we wish to refer. Dr. Manning went fully into the recent legislation in England and Queensland, and criticised the provisions of the respective Acts. (Full particulars of the Queensland Act will be found in our editorial of February, 1897.)

The disastrous consequences wrought upon its victims by strong drink, and the privations and sufferings entailed upon those dependent upon inebriates, are too real and numerous to necessitate any apology from those anxious to mitigate the evil. The abuse of alcohol so perverts the whole nature, both physical and moral, of those who give way to it, that they become deceitful, untruthful and vacillating; and it is to try and rescue these frail creatures from themselves and to restore them as useful members of the community that we have to

aim. Possibly, only medical men are fully cognisant of the number of deaths that can be attributed, either directly or indirectly, to alcohol, as the Registrar General's returns give no adequate idea.

The attempts that have hitherto been made in Australia to reclaim the inebriate from his evil practices have mostly failed from the want of any legal power to detain him against his will. The principal effort that has been made in New South Wales of late years was initiated by Mr. Courtenay Smith, at first as a semi-public institution, and afterwards carried on on his own account, in which a very picturesque and secluded spot at Middle Harbour known as Echo Farm (and afterwards as Rest Haven), was selected. There the treatment chiefly consisted of light work in the open air, aided by the isolated position and by moral and religious influences. Although a moderate amount of success was attained, the ultimate result was financial loss to the originator, and the same result would probably attend any other effort under present circumstances. An Inebriates' Bill was introduced into and passed through the Legislative Council of New South Wales last year by the Hon. Dr. Creed, which gives power to a Judge of the Supreme or District Courts, or to a police magistrate, to commit an inebriate to the custody of a friend, or to some public or private hospital, or to a hospital for the insane; but no provision is made for the establishment of any special hospital or home for inebriates, and on this account we are afraid that, should it become law, it will not prove of so great value as it would were such a provision made. We trust that our politicians will take this matter into their serious consideration, and, when legislating at all, that they will deal with it in a liberal spirit, as the object to be gained in rescuing so many of our ablest intellects from utter ruin is one worth some expenditure.

VACCINATION IN TASMANIA.

A RECENT report of the proceedings of the Central Board of Health, Tasmania, shows the unsatisfactory position the Government has placed that body in.

The Central Board are responsible for the carrying out of the provisions of the Vaccination Act of 1898, and members are anxious and willing to give effect to the law, but the Government refuse to find the money, and consequently the matter is hung up. At the discussion which took place at the May meeting, the Secretary stated that the regulations framed

by the Board had not been confirmed by the Government, and in explanation, the President, who is also Chief Secretary, stated that the Government hesitated to enforce any regulations which meant the expenditure of money. What, then, was the use of passing a Vaccination Act which was to remain a dead letter because there were no funds to carry it out? We may assume when Parliament decided to have a Vaccination Act that it was equally well known that such an Act would mean the expenditure of public money. How the Government can refuse to carry out the laws of its country is more a question for statesmen, but we have no hesitation in saying the expenditure of an annual sum of £1,000 in vaccination, as a preventive against small-pox, would be money well spent. The "little" epidemic of small-pox in Launceston some twelve years ago cost the colony directly £13,000, and the amount of inconvenience and loss to business men was very considerable. The action of the Government savours of the policy "penny wise and pound foolish." Of course the medical members of the Board are highly indignant at the action of the Government, and it was ultimately resolved that the President should interview the Premier and request him to grant the Board a sufficient sum to enable them to give effect to the Act.

We have no desire to belittle the members of the Board, but we do say they should vigorously protest against the insufficient amount voted from time to time for the administration of public health purposes. It is ludicrous to expect any Board to carry out the work of a Health Department in a colony like Tasmania for an annual sum of £400—three-fourths of which is paid as Secretary's salary. We regret to think that at the same meeting at which this discussion on vaccination took place that the Board should have agreed "that no alteration in the estimate would be required—if the Vaccination Act was not to be enforced."

Unless the Board are willing to exist in name only we should strongly advise that every effort should be made to secure an adequate amount on the estimates to enable it to carry out the work that is expected of it by the public.

While the health records show that the climate of Tasmania is an admirable one, and conducive to long life, we have from time to time pointed out the desirability of greater efforts being made in the way of preventive measures. We advised when typhoid fever was so prevalent at Beaconsfield and Queenstown during last year, that a proper enquiry should

be made as to the cause of the epidemic, and such measures taken as would prevent its recurrence. Of course this cannot be done without money, and it is to be hoped that members of the Board will not rest satisfied with the "do nothing" policy of the Government, but that they will make such representations to Parliament as will secure for them an amount of money which will enable them to carry out the duties of such an important department with credit to themselves and benefit to the public.

MEDICAL MEN AND PATENT MEDICINES.

WE have more than once had complaints laid before us by members of the profession regarding the manner in which patent medicines of various kinds are brought under their notice. Almost every post, nowadays, brings to the doctor's door some form of an advertisement of an alleged new or improved remedy. The missive, so characteristic of the times, comes in various guises and almost always in "a questionable shape." A late issue of the *British Medical Journal* drew attention to the circulation of envelopes with pictorial illustration, in very bad taste, of the merits of some article of female attire. In this country we are subjected to the receipt, through the post and otherwise, of illustrated covers of different kinds, large-letter "puffs" of, say, genito-urinary drugs, neuralgia cures, and so forth. Such meretricious devices can be intended only for the unwary eye of the layman, and the physician who is the reluctant and bored recipient cannot but feel that he is being made use of as a medium of advertisement. This is, we should say, "going one better" than the old phrase "recommended by the Faculty."

The medical practitioner is ever glad to have a new or elegant pharmaceutical device, or a novel or cunning surgical appliance, brought under his personal notice. The insinuating promoter of quack remedies, however, deserves a short shrift at his hands. So also does the nostrum "barracker," if we may be allowed to use a sporting term. The following is an extract from a recent circular referring to a certain pharmaceutical preparation, the merits or demerits of which need not occupy us at the present moment:—

"It is more than 'a substitute for Cod-Liver Oil,' for, apart from its simple nutritive value, it is a mucous membrane stimulant and an antiseptic possessing marked soothing and

healing properties. It exerts a wonderfully beneficial influence upon all mucous surfaces, especially of the digestive tract, where its full local soothing and disinfectant action is directly obtained, making it a powerful aid to digestion. By disinfecting the secretions it promotes a healthy absorption, resulting in an improved appetite and a better assimilation of food." And further, "The best results follow in the treatment of chronic lung affections the character of the sputum is almost immediately changed." The delightfully vague designation of this Company calls to mind the old definition of a syndicate, as a something which had neither a soul to be lost nor a body to be kicked. The cool assumption of the *role* of clinical preceptor makes one wish it were only a more definite entity, capable of being treated according to its deserts.

We feel confident that in drawing attention to the matter in this manner we are voicing the general opinion of the medical profession, and we would suggest to our readers the propriety of strenuously discountenancing this abuse at every opportunity. We would also urge all honest workers in the field of pharmacy to eschew the use of such means of arresting attention. Good wine needs no bush, and legitimate pharmacy is not commended to our respect by mercenary trumpeting of this kind.

May we, in conclusion, remark that there appears to be among qualified medical men a growing habit of lending their names, by letter and otherwise, to vendors of various specifics. Doubtless this is at times done from a good motive; but, on consideration, it will be seen that it is but a modified form of advertising, the astute man of business using the profession as a medium for the easy market of his goods. All medical men are not authorities in pharmacology, and it behoves them not to be paraded as such to suit the designs of interested persons.

HOSPITALS IN TASMANIA.

THE LAUNCESTON DIFFICULTY.

It is quite evident that from what was said by a speaker at a recent meeting of the Launceston Hospital Board of Directors and reported in the *Hobart Mercury* that steps are to be taken shortly to effect a change in the system of

controlling the general hospitals of Tasmania. The information may not be official, but it was clear enough to show that there were good grounds for believing that the Government contemplates substituting elective for nominee boards. This change will not be at all palatable, particularly to the body of gentlemen who manage the Launceston institution. There they are conservative to a degree. They flatter themselves that theirs is the best managed hospital in Australasia, and in consequence have all along refused to make any alteration in their methods of work, although it has been pointed out on several occasions that they are in some directions very far behind the times. Their system of medical supervision, for instance, is somewhat unique; but as they have been fortunate with their officers, and lucky enough to get their ideas carried into effect without any serious hitch, they believe it the best. The members of the medical profession in Launceston, almost to a man, hold otherwise, and think that in Launceston, as in all the leading centres of the world, the medical officers of the hospital should be under the supervision of a medical staff, consisting of the best doctors in the community, under whose care the patients would be bound to receive better treatment than they can possibly obtain from the young men who are usually in charge. They could not, however, convince the members of the Launceston Hospital Board, and, therefore, they were compelled to go to Ministers and ask for reforms which were opposed by the Board of Management. The alteration hinted at by Mr. Collins is the first step in the direction of these reforms, and when it is taken the members of the profession in Launceston will require to arouse public interest, so that when the Boards become elective instead of nominee, men will be returned who will carry out the other changes necessary to bring the general hospitals of the colony up to date, so that the best means may be at their command for dealing with suffering and disease, particularly among the poor.

From an experience of city and country hospitals in other parts of the world it is our opinion that those who supply the funds should elect the Board of Directors. (1) If the Crown be a subscriber then the Crown should elect a Director or a reasonable number of Directors. (2) The members of the general public who are subscribers of stated sums should also elect Directors. and (3) the Honorary Medical Staff should also be represented on the Board, as these gentlemen give, by means of their services, a very large sum to the institution, and afford

other invaluable assistance. The Board of Directors should appoint the whole of the medical staff, both Resident Paid and Honorary Visiting, or what is better, a *special selection* committee appointed by the Board should consider the applications and recommend the *best* men for appointment to the Board. As a working constitution we can recommend that of the Prince Alfred Hospital, Sydney, and next to it that of the Sydney Hospital. We do not approve at all of the constitution of the Melbourne Hospital, nor of the Adelaide Hospital, nor the Launceston Hospital, as far as these matters are concerned, neither does the profession generally.

SHORT EXTRACTS FROM FOREIGN MEDICAL LITERATURE.

By WALTER SPENCER, M.D., ENMORE, N.S.W.

ANNALES DE MEDECINE ET DE CHIRURGIE INFANTILES, FEBRUARY, 1898.

PROFESSOR SOLTSMANN, of Leipzig, contributes a valuable article on pemphigus neonatorum, idiopathic and symptomatic. The former resembling pemphigus in adults, of rapid and usually benign evolution, becoming sometimes epidemic and contagious; the latter subacute or chronic sequela after an infectious malady penetrating deeper, sometimes causing necrosis, and sometimes after long duration developing into pemphigus foliaceus.

It may be complicated by syphilis which will affect palms and soles but congenital syphilis alone would produce pustules arising upon red macules or papules, not bullæ like pemphigus, which, moreover, spares palms and soles.

Dr. Rigby's epidemic of 1834 is notable as having conveyed contagion not only to the mothers but also to the observer himself. In maternity hospitals the disease has always spread rapidly. Klemm remarked the greater incidence among neighbour's dwellings and among vigorous healthy infants. Propagation in some instances by nurses and midwives is proved.

In many epidemics the mothers have suffered also, but whether infection be carried by a volatile or by a fixed agent is still undetermined.

In acute pemphigus the bullæ usually arise suddenly from an erythematous base, from a macule, or from a red nodule, though they may also appear upon a perfectly healthy skin. They leave no cicatrices, but desiccate and form crusts which fall away without revealing ulceration. The larger the bullæ the less likelihood of areolæ. They may occur on mucous membrane. Successive crops are characteristic. The eruption lasts ten or twelve days, and the entire process is over in three weeks.

Chronic cachectic pemphigus is subject to many and serious complications. In view of the fact that pemphigus is not confined to the period following birth, the opinion of Bohn that it is in relation to the physiological exfoliation of the newly born, is not tenable; nor have we any confirmation of Behrend's assertion that pemphigus foliaceus of adults differs only from that of infants in that the latter displays its morbid characteristics *ab initio* because of the feeble coherence of the chorion, a condition which can

only arise in adults after much pathological irritation. Ritter noted that infants who had suffered from pemphigus were liable to attack by dermatitis exfoliativa, in which all traces of pemphigus became merged and lost.

Treatment.—Prophylaxis Asepsis: Hebra's tar baths are not suitable for infants, rather decoction of oak bark 500 grammes in water 4 litres to be added to the bath t. d.; the child not to be rubbed dry, but to be wrapped in absorbent wadding. For extreme exfoliation, starch powder. To absorb secretion and check putrescence, ac. salicyl. with pulv. carbon. For eruption on mucous membrane, tannin and sugar. Internal medication is superfluous.

The same journal mentions the exhibit by Kreibich to the Medical Club, Vienna, of a boy 12 years old who had suffered from pemphigus for four months. The eruption began on the neck, and invaded the rest of the body irregularly as patches of erythema, which in a few hours became bullous and then purulent. The mucous membranes were intact; the general health bad.

Stassano's researches show that *absorption* and conveyance into the circulation of *mercurial compounds* is effected exclusively by leucocytes, as has already been ascertained of the soluble salts of iron and silver. Metchnikoff recognises this function as special to the polynuclear and mononuclear leucocytes—the same mesodermic cells which absorb and destroy microbes.

LONDON LETTER.

Prince of Wales' Hospital Fund—Vaccination and Leprosy—Malarial Infection—Resolution of the N.S.W. Branch of the British Medical Association—An Oculist's Mistake.

THE Annual Report of the Council of the Prince of Wales' Hospital Fund has just been issued. During the two years of its existence it has distributed £89,000, and has thus enabled the hospitals participating to re-open and maintain 242 beds previously closed from want of funds. Last year £32,000 was distributed, and it is hoped that this year a sum of £50,000, at least, will be available. Not only is material financial help afforded to the hospitals and convalescent homes, but these institutions have profited by the inspection and recommendations of the Visiting Committee of the Fund. An appeal is made to all classes of society, who do not at present contribute in any way to the support of the hospitals, to become subscribers to this fund.

Some remarkable statements as to the relation of vaccination and leprosy have recently been made use of by the anti-vaccinationists. Dr. Blakewell, in 1871, when Vaccinator General of Trinidad, reported to the Select Committee of the House of Commons that the spread of leprosy in the tropics was largely attributable to vaccination. A report has just been issued by Dr. Smith, Inspector of Leprosy to the Canadian Government, in which he states that "at the present time there are twenty-one inmates in the Tracadie Lazarette, representing all stages of leprosy; and that vaccination for small pox is a frequent cause of propagation of the disease. In Mexico and the Sandwich Islands after general vaccination numerous leper centres developed." These statements would not deserve consideration were they not made by responsible officials. But in any case it is hardly conceivable that leprosy could be communicated

directly by vaccination, unless lymph taken from a leper were used at the operation. There is no evidence at present to prove the existence of the bacilli, except in the skin tubercles and nerve trunks, and all attempts to cultivate them have so far apparently failed. Still, the matter is worth consideration, and the only safe course to follow must be in the use of pure calf lymph only.

At the Royal Society's conversazione held last night, Surgeon-Major Ross showed, under a series of microscopes, the process of development of the malarial parasite in the mosquito. Each organism contains a mass of pigment, and after seven days covers the tissues of the mosquito with something like a wart. The progress of the contagion has been traced into the poison gland in the proboscis of the mosquito, from whence the malarial infection in the form of the parasite is injected into the victim of the bite. The mosquito capable of conveying the infection is, according to Surgeon-Major Ross, of a peculiar species, and its extinction may be looked for at no distant date.

At the last meeting of the Council of the British Medical Association, a letter from Dr. Goode, of Sydney, was read, calling the attention of the Council to a resolution passed by the New South Wales Branch re imposing certain restrictions upon membership of the "Association." The President of Council pointed out that while the Branch were at liberty to make regulations affecting the membership of their own Branch, they could not in any way interfere with the conditions of membership of the Home Association. The misunderstanding arose, of course, from the use of the word "Association" in the resolution, as the object of the resolution was simply to apply to membership of the Branch.

The Montreal correspondent of the *Standard* reports an unfortunate occurrence there in the practice of an ophthalmic surgeon. A patient, whose diseased eye was beginning to cause sympathetic ophthalmia in the other, consented to have the former one removed. The surgeon operated and reported to the parents of the patient the success of the operation, but then discovered that he had removed the sound eye, and had thus rendered his patient quite blind.

London, May 4th, 1899.

LETTERS TO THE EDITOR.

AMBULANCE NURSING CLASSES.

(To the Editor of the *Australasian Medical Gazette*.)

DEAR SIR,—I wish to draw your attention to the very unjust insinuations in your editorial under the above heading in the last *Australasian Medical Gazette*.

There are, I believe, only two ambulance associations in Sydney that instruct women, and as you say that the Civil Ambulance and Transport Brigade have discontinued holding classes indiscriminately I can only infer that the remarks in your editorial refer to the St. John Ambulance Association, and to which I have the great honour to belong.

The St. John Ambulance Association never has and never does issue nursing certificates. To those who attend an advanced course in "Home Nursing and Hygiene," and pass a satisfactory examination, a First Aid Certificate on Vellum is issued. In this certificate there is no reference to nursing whatsoever. I fail to understand that such an error should have crept into

the *Australasian Medical Gazette*, considering that your editor was one of the pioneers of First Aid in New South Wales, and helped to found the Newcastle centre of the St. John Ambulance Association.

Do be generous enough to think that many medicos try to do their duty to their profession even if they are connected with Ambulance Associations.

Yours truly,

REUTER E. ROTH,

Hon. Associate of the Order of St. John of Jerusalem, in England.

May 30th, 1899.

A NEW INSTRUMENT FOR ADENOIDS.

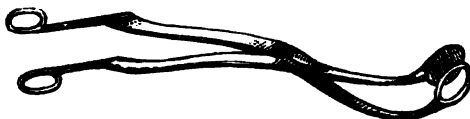
(To the Editor of the *Australasian Medical Gazette*.)

SIR,—It is said that every student of ophthalmology invents either a speculum or an ophthalmoscope. So it might be said with equal truth that every student of rhinology invents an instrument for the removal of adenoids. This instrument was designed by me as an improvement upon Löwenberg's forceps which I found did not always bite the growth through and that it was sometimes necessary to tear it before it could be removed. Sometimes stripping the mucus membrane of the pharyngeal wall. The instrument is the same length as Löwenberg's with, however, cutting blades, one of which is solid and wedge-shaped, with the thin end of the wedge above and its cutting surface concave in both directions. On closure the solid blade passes inside the other, and this cuts upon the same principle as a pair of scissors. It can also be used in place of the ordinary tonsil punch forceps.

Dr. Brady tells me that he has used it successfully for removing posteriorly enlarged inferior turbinates.

Yours, etc.,

THOS. S. KIRKLAND, M.D., F.R.C.S.E.,
Assistant Surgeon Throat and Ear Department, Sydney Hospital.



ON THE USE OF QUACK SPECIFICS.

(To the Editor of the *Australasian Medical Gazette*.)

SIR,—As an illustration of the familiar fact that similar cases are often met with almost simultaneously, and of the difficulty we often have in distinguishing between cause and effect, and mere sequence of events, the following cases might be of interest:—

1. A middle-aged lady, a sufferer off and on from indigestion for years, had been rather better than usual till the week immediately preceding her attack on the 1st May. On that day she took a dose of Yaala (one of the latest nostrums placed before the public as a "cure" for indigestion) before lunch, and again before dinner. Soon after dinner she became faint, suffered from nausea and copious hæmatemesis.

2. A middle-aged lady, who when a girl suffered most severely from indigestion, and for many years has been troubled more or less in this way, though not more so of late than usual, on 18th May took a dose of Yaala before lunch, and also before dinner. She went into a friend's room, and, while waiting to go to the dining-room with her, she became faint and vomited more than a pint of dark clotted blood.

Now I do not for one moment imagine or suggest that this latest "absolute cure" is capable of causing hæmatemesis in persons who have no organic lesion of the stomach, but are merely suffering from some functional disturbance of that organ; but in view of these two cases one might well ask if, in the case of persons already suffering from gastric ulcer, it may not have been the determining factor in causing hæmorrhage.

Some drugs are considered dangerous in these cases. Thus, in Fagge's "Principles and Practice of Medicine," 2nd edition, vol. ii., p. 353, referring to Dr. Brunton's views, it is stated, "In common with other writers, he speaks very strongly against the use of mercury in any form, saying that he is certain he has witnessed relapses which could only be attributed to its administration."

I do not take sufficient interest in the matter of patent medicines to have Yaala analysed. The public like to buy these things, and it is a case of "Caveat emptor." Medical men see a good deal of the unsuccessful side of self dosing by patent medicines, but the public don't know of it. It is about time there was a new reading of the old gibe directed against the medical profession, for surely now it is the public "who pour stuff of which they know little into bodies of which they know less."

I feel that it is rather presumptuous on my part to cast any suspicion on the virtue of Yaala, which is said to be "unapproachable," the more so since its good qualities are vouched for "by leading men of the colony," who, doubtless, from a prolonged experience of public banquets, feel that they are more than competent to pronounce opinions on matters about which we poor doctors feel that we do not yet know everything. It is not difficult to guess what would be the effect on the prospects of any young medical man who should be unfortunate enough to prescribe beforehand for two such cases. I believe both patients to be suffering from gastric ulcer, and their cases occurring so close together is the more strange, seeing that they had each taken only two doses of Yaala, that they are the only persons who, to my personal knowledge, have taken it, and that it is more than a year since I saw a similar case.—Yours, etc.,

WM. CHISHOLM, M.D. Lond., M.R.C.S. Eng.

MEDICAL DEFENCE UNION WANTED IN QUEENSLAND.

(To the Editor of the Australasian Medical Gazette.)

Sir,—The letter of your correspondent, "Queensland," in the April issue, but emphasises what Dr. Wheeler, the retiring President of the Queensland Medical Society, consciously or unconsciously made most apparent in his address, as reported in your February issue. The former states what is wanted, the latter proves it. Seeing that everywhere demands more and more exacting are being made on the medical

profession by friendly and other societies, that fees which scarcely cover cab fare are paid to medical men by Government, and accepted almost without protest, and that overcrowding of the profession is increasing rapidly, it is not to be wondered at that Queensland should suffer in common with other countries, but it is surprising that medicos there have not combined as they have elsewhere. Their two medical societies probably do as much for the scientific advancement and improvement of their members as any other society, but as ethics are tabooed in the one society (the question of fees being construed as ethics), and not considered in the other, the matter of medical defence has been for some time in abeyance. Perhaps the fate of the Queensland Medico-Ethical Association has stopped them making any further advance in that direction, but, rightly considered, the formation of that society ought to have stirred them to further effort, for although it failed in its primary object, viz., to raise the rates of pay for lodges, yet it proved the unanimity of the profession on the point, and also showed that the men there were, with one or two exceptions at the most, perfectly loyal to one another, although to be so meant the loss of portion of their incomes. What killed the Association was the influx of medical men from the other colonies, but with a system of federation among medical defence unions such could be more effectually dealt with. Once let "Queensland," and those of a like mind, join themselves together, and instead of waiting for "able and influential members of the profession" to make a beginning, do so themselves, and they will then find the others ready to come in and help them when needed.

There are many ways in which a Medical Defence Union could be formed. That, however, which I would advise "Queensland" to follow is the Medical Defence Association of Victoria, Limited, which has the small annual subscription fee of 10s., though each member pledges himself to pay a sum not less than £1 if such a call be deemed necessary. This society now numbers 324 members, and, in addition to providing legal assistance to its members, it takes cognisance of everything affecting the welfare of medical practitioners generally, e.g., it considered last year such questions as increased fees for notifying infectious diseases, abuses of hospitals, friendly societies, amendment of the Poisons Act, &c. The Association is acting wisely in endeavouring to effect a union of all the medical men in the colony before organising, or attempting to organise, a general strike against lodges, which is inevitable sooner or later under present conditions. Meanwhile, as medical men do not object to lodges, but to the abuses thereof, a practical protest could be made against the present lodge system by establishing a Provident Medical Association, on the lines of the Sydney and Suburban Provident Medical Association, which is founded on that of Eastbourne, England. Of course this could be done without the aid of a Medical Defence Union, indeed it would perhaps be better to keep it separate, as is done in N.S.W. If Queensland doesn't care to adopt the method of the Sydney Association, there are other models which may be suitable, e.g., the Battersea Provident Dispensary, the Cork Medical Benefit Association, or the Durham County Medical Union. In the last-named provision is made for an indemnity fund to recoup members who lose portions of their income by giving up their appointments.

In reference to Dr. Wheeler's address, in which he suggests that as the Government do not pay for notifying infectious diseases they should at least provide medical men with forms, and allow them to go free by

post, I would respectfully draw his attention, and that of all other Queensland practitioners, to a paragraph in the *British Medical Journal* of January 21st last (page 166), by which they will find that when a similar state of things occurred in Jamaica the branch of the British Medical Association there brought the matter under the notice of the Council of the parent Association, and on the President of the latter calling the attention of the Secretary of State for the Colonies to the injustice, Mr. Chamberlain replied stating that the Governor of Jamaica had been instructed to amend Law 22 of 1898 so as to provide for payment to medical men notifying infectious diseases. Surely the same can be done in Queensland, but one thing is certain, it will never be done by merely complaining without taking action. As to paying postage on letters notifying cases, that matter can be easily settled by simply posting the notices without affixing stamps. The writer did this in Queensland, and had no trouble whatever over the matter, not even the protest he expected, and if every medico did the same the question would soon be settled, and all the quicker because as no fees are paid for notification the Government cannot deduct postage therefrom. In Victoria medical practitioners are not only paid for notification (though the fee is a ridiculously small one, 1s.) and provided with books of printed forms for the purpose, but they can also post or telegraph such notices without any charge whatever, while Medical Officers of Health can use the post and telegraph service in the same manner.

Hoping that Queensland will come into line with other colonies by forming at once the needed Medical Union.—I remain, yours truly.

May 9th, 1899.

WIRREENUN.

PUBLIC HEALTH.

A ROYAL Commission on Tuberculosis and Tick Fever has been decided upon and approved by the Government of New South Wales. The president is Mr. Sydney Smith (late Minister for Mines and Agriculture), and the following are the members:—Messrs. Alexander Bruce (Chief Inspector of Stock), G. H. Cox, M.L.C. (President of the N.S.W. Sheepbreeders Association), Alban Gee (manager Sydney Meat Preserving Company), James James (representing the South Coast district), George Maiden (of Messrs. Goldsbrough, Mort and Co.) and Dr. Ashburton Thompson (President of the Board of Health). The Commission is appointed "to make diligent and full inquiry into the prevention of tuberculosis among animals, the effects on man of consuming the meat or milk of tuberculous animals; and into the administrative measures which are available, and which might be taken towards prevention of tuberculosis in animals; also, into the effects produced on the meat and milk of cattle affected by tick fever, and the protective measures which are available, and which would be desirable for preventing the spread of tick fever, and further, into the administrative agencies existing and desirable, to cope with diseases in general which affect stock." Evidence will be taken on the subject both in Sydney and in the country districts of the colony, and, if necessary, will visit Queensland and some of the other colonies.

At a Launceston (Tas.) City Council meeting recently it was agreed that a bill should be presented to Parliament during the ensuing session enabling the Council to pass and enforce a by-law restricting children under a certain age from strolling about the streets or other public places at night.

The Hobart Officer of Health (Dr. Sprott) reports that during the month of April there were 35 deaths registered in the registration district of Hobart. There were 19 deaths—males, 8; females, 11—in the city, as compared with 30 for the corresponding period of last year. The death-rate was, therefore, equal to 7.56 per 1,000 per annum. The principal causes of death were:—Typhoid fever, 2; cancer, 2; tuberculosis, 4; apoplexy, 1; heart disease, 1; enteritis, 1; infantile debility, 3; and the remainder were of a general nature.

The Central Board of Health, Tasmania, is urging the Government to carry out the provisions of the Vaccination Act of 1898, and the Government hesitate because of the annual expense of £1,000.

A roster of medical men who are willing to consult with the Port Health Officers of Hobart and Launceston in cases of suspected small-pox is being established in Tasmania.

The total number of infectious diseases reported in Tasmania for the month of April was:—Typhoid fever, 55 cases (21 of them in Hobart), as compared with 88 in the preceding month, and 58 the mean for April for nine years. Scarlet fever, 74, as compared with 77 in the preceding month. There had been a large increase in Hobart—43 cases. The Government is negotiating for the purchase of a site for an Infectious Diseases Hospital.

DISPOSAL OF CITY REFUSE.

At a meeting of the Sydney City Council held on May 30th, the report was brought up of the committee appointed to inquire into and report upon the best method of disposing of the city refuse. It was stated that the committee had made diligent inquiry into the various methods in vogue for the treatment of city refuse and garbage. The report proceeded:—

"Proposals.—The evidence taken discloses four distinct proposals, viz.:—1, Burial, by mixing and covering with sand or soil; 2, burning by means of destructors; 3, treatment by steam—extracting grease and manurial products; 4, towage to sea. The present system adopted in the disposal of city refuse consists in collecting in carts and depositing it on a portion of land behind Mount Rennie, Moore Park. The present annual cost of street cleansing, collection and deposit of refuse may be set down as approximately £35,000.

"Towage to Sea.—This method has been in vogue in many parts of the world, and the committee believes that Sydney possesses advantages for the adoption of this system which are not enjoyed by many of the European countries. At a distance from the coast, say seven miles, a southerly current is said to prevent absolutely any of the refuse finding its way back to our foreshores. The system, according to the evidence, could be carried out at small cost. In addition to this, however, would be the provision of receiving sites and the cost of construction of jetties, shoals, &c., the expense of which at this stage it is impossible to estimate with any degree of exactness, inasmuch as the ends of streets, say Bathurst-street and Miller's Point, as suggested, would not serve without a substantial increase of accommodation for the large quantity of material to be dealt with.

"Recommendations.—The committee, having carefully weighed the evidence, and considered the methods submitted, recommends to the council:—1. That in view of the gradual increase of population, and its extension on all available areas in the city, it is essential that all refuse and garbage should be absolutely

destroyed. 2. That the most effective system of destruction of refuse is by fire. 3. That, whatever may be the method of destruction finally approved, provision shall be made for prohibiting picking and sorting, unless such material intended for removal is specially disinfected. 4. Your committee do not recommend the adoption at this juncture of any particular class of destructor, but would advise that a specification of requirements be drawn and submitted to general competition. 5. That a disinfecting chamber be provided and worked in connection with every garbage destructor erected. The suggestion that a garbage destructor and an electric light plant and power house be erected on one site, so that the heat of the destructor could be utilised for generating steam power for electric light and other purposes, has also been considered, but the evidence is not sufficiently conclusive to enable your committee to recommend the adoption of such an amalgamation at present.

"Recently Introduced Improvements.—In connection with the method of garbage disposal at present in use, and pending the final settlement of the question, the committee is pleased to record two recent improvements initiated by the Mayor. 1. Tarpaulins are now used to cover the carts in transit, so that the contents—always offensive—are hidden from sight and cannot be blown about by the wind. 2. A weighbridge has been erected at the tip, and the weight of the contents of each cart as it arrives is ascertained. The results are satisfactory, it being found that instead of from 16 to 20 cwt. supposed to be carried, some of the carts carried as little as 6 cwt. An immediate benefit accrued to the council in that the services of some carters have been dispensed with and others will follow, and the cartage of light loads in future by dilatory employees will be obviated. His Worship has also offered a prize of 10 guineas for the best design of covered refuse cart submitted. Some 72 designs have been received and are being reported upon."

The report was adopted, and it was also agreed that a specification be at once prepared and submitted to the general purposes committee, by whom tenders should be invited.

The Mayor said that he had received from America an offer from a company to put up a destructor, and work it for a certain length of time without cost to the council.

SYDNEY SEWERAGE.

At the meeting of the Metropolitan Board of Water Supply and Sewerage, held on April 26th, the report of the medical adviser, Dr. Theo. Mailler Kendall, for the quarter ended March 31, 1899, was tabled. From it we extract the following:—The report stated that the population of the metropolitan area showed a decided increase against the corresponding quarter of the previous year, the increase being notable not only in the city but also in the suburbs. In the city the density of population in the January-March quarter of 1898 was given as 42·7 to the acre, while in 1899 it was 43·9. The population of the city during the January-March quarter of 1898 was 95,250, which in 1899 had increased to 97,875. The population in the suburban area increased in the same quarter from 315,060 to 324,225; a total increase for the 12 months within the metropolitan area of 11,800 persons.

The number of deaths from all causes was greater

than the total for the corresponding quarter of last year, and an increase is noted in such diseases as whooping-cough, measles, typhoid, and phthisis. In 1898 the total deaths during the quarter were 1356, of which 431 were within the city, while in the corresponding quarter this year 1373 deaths occurred in the metropolitan area, 429 being within the boundaries of the city. The symotic death rate in the city rose from 1·8 per 10,000 of the population at the end of December, 1898, to 2·5 at the end of January, 1899, the rise being due to the prevalence of whooping-cough. The rate fell at the end of February to 1·1, and at the end of March it stood at 1·0. The total mortality from diarrhoea in the metropolitan area in 1898 was 88, and in 1899 87, a noteworthy decrease.

Dr. Kendall remarks: "The effect of insanitary conditions is seen in the miserable physique of the masses, their dirt and immorality, and the appalling sacrifice of infant life. It cannot be expected that the less educated masses will improve in physique and appreciate the value of cleanliness, both of person and dwellings, so long as they are provided with jerry-built houses flung together on building sites of made soil. Dr. Robertson, of Sheffield, after a long course of experiments, has found that surface soils contain micro-organisms of different species, and that the number of those organisms is far greater in made soils. The micro-organisms found in made soils are mostly pathogenic in character, and there is in them a tendency to upward diffusion, especially when accompanied by heat. These pathogenic micro-organisms, while they lie dormant during the winter months, sally forth in the warmer seasons and become a menace to the general health. All made ground, especially that composed of household garbage or street refuse, should be avoided as sites for buildings or public parks. It is not reasonable to suppose that street sweeping, containing various kinds of abominations, can be at all healthy to use as constituents of public parks or building sites. If diarrhoea, which is essentially a disease of the soil, is to be avoided, proper measures must be taken for preserving the soil itself free from all germs of an evil nature."

In the whole of the metropolitan area there were only two deaths from diphtheria during the quarter, against 11 during the corresponding period of 1898. No deaths from this cause occurred in the city, and in this connection Dr. Kendall points out that diphtheria bears little, if any, direct relation to sewerage systems. Till late years it was essentially a rural disease, chiefly transmitted through air infection, and its relation to school attendance is well shown by what is known as the "holiday drop." Of course, it should be remembered that individual carelessness contributes to the spread of this disease.

The mortality from phthisis for the quarter ended March 31 in 1898 and 1899 was as follows:—City, 1898, 31; suburbs, 1898, 87; metropolitan area, 1898, 118; city, 1899, 49; suburbs, 1899, 74; and metropolitan area, 1899, 123. In this connection Dr. Kendall remarks: "The bacillus of tuberculosis is a saprophyte as well as a parasite, and can grow in the organic matter contained in expired air, or in vapour arising from the soil. To remedy this, overcrowding of rooms must be avoided; there should be free ventilation, or, in the words of Dr. Manson, swelling and flushing with fresh air; every facility for a plentiful supply of sunlight; and measures should be taken to free the soil from vapour by drying it." Considerable stress is laid upon the fact that contagion of tubercle is greatly owing to public conveyances, in which have also been found the bacilli of typhoid and septicæmia.

VITAL STATISTICS.

SYDNEY.—There were 915 births and 453 deaths registered in Sydney during April. The principal causes of death were:—Typhoid fever, 11; scarlet fever, 1; diphtheria, 3; enteritis, 45; pneumonia, 19; cancer, 25; phthisis, 31; bronchitis, 16; whooping cough, 15. There were 6 suicides.

MELBOURNE.—The chief causes of death in greater Melbourne during April were as follows:—Diphtheria, 2; cancer, 32; phthisis, 51; whooping cough, 12; bronchitis, 15; typhoid fever, 29; pneumonia, 22. There were 557 deaths registered during the month.

TASMANIA.—The Government Statistician's report on vital statistics of the colony shows that during the month of April 93 births were registered in Hobart and Launceston. Deaths.—The deaths registered in April in Hobart and Launceston numbered 67. The deaths under 5 years of age numbered 19, or 28·36 per cent., of which 16 were under 1 year of age.

NEW ZEALAND.—During April, the number of births and deaths respectively were in Auckland, 108, 55; Wellington, 96, 43; Christchurch, 76, 36; Dunedin, 70, 44. Total births, 350; total deaths, 178. In the four cities there were deaths from measles, 7; cancer, 10; phthisis, 10; diarrhoea, 28; typhoid fever, 6; old age, 7; pneumonia, 7.

BRISBANE.—There were 150 births and 91 deaths during the month of March. There were 5 deaths from scarlet fever, 4 from typhoid fever, 6 from diphtheria, 8 from diarrhoea, 3 from cancer, 8 from phthisis, 5 from apoplexy, 6 from convulsions, 5 from bronchitis, 5 from pneumonia, 5 from enteritis. During April there were 4 deaths from diphtheria, 3 from typhoid fever, 8 from diarrhoea, 4 from cancer, 9 from phthisis, 7 from pneumonia.

ADELAIDE.—The principal causes of death during March were:—Enteric fever, 5; cancer, 5; phthisis, 5; pneumonia, 3.

WESTERN AUSTRALIA.—There were 52 deaths from typhoid fever, 13 from cancer, and 26 from phthisis, in the colony during the quarter ending March 31st.

MEDICAL NOTES.

The Government of Queensland has appointed Dr. George William Frederick Paul to be an honorary representative of Queensland at the Greater Britain Exhibition, Earl's Court, London.

The Government of New South Wales has decided to fill up the vacancy which has been of such long standing in the office of Director of Charitable Institutions by appointing Dr. Robert Thomson Paton to it. Dr. Paton for several years held the post of Government Medical Officer and Vaccinator for the city of Sydney.

LITERARY NOTES.

Dr. A. E. Cox, of Forbes, N.S.W., has presented to the library of the New South Wales Branch of the British Medical Association a curious old medical work, entitled, "A Treatise on the Art of Cupping: In which the History of the Operation is traced; and the various diseases in which it is useful indicated; and

the most approved method of performing it described. By Thomas Mapleson, Cupper to His Royal Highness the Prince Regent, to the Westminster Hospital, and the St. Pancras Parochial Infirmary. London: Printed for the Author; and sold, price 3s. 6d., at his residence, Golden Square; also by J. Callow, Medical Bookseller, Crown Court, Soho. 1813." The small volume consists of 80 pages 12mo. The author gives the following list of diseases "in which cupping is generally employed with advantage: Apoplexy, Angina Pectoris, Asthma, Spitting of Blood, Bruises, Cough, Catarrh, Consumption, Contusion, Convulsions, Cramp, Diseases of the Hip and Knee Joints, Deafness, Delirium, Dropsy, Epilepsy, Erysipelas, Eruptions, Giddiness, Gout, Hooping Cough, Hydrocephalus, Headache, Inflammation of the Eyes, Inflammation of the Lungs, Intoxication, Lethargy, Lunacy, Lumbago, Measles, Numbness of the Limbs, Obstructions, Ophthalmia, Pleurisy, Palsy, Defective Perspiration, Peripneumony, Rheumatism, to procure Rest, Sciatica, Shortness of Breath, Sore Throat, Pains of the Side and Chest." A formidable list truly! We wonder what symptoms were not treated by cupping. The writer asserts that he had cupped one person far advanced in life seventy times within the period of one year. The author quotes Celsus, "Idque auxilium (sc. cucurbitulae), ut minus vehemens, ita majus tutum; neque unquam periculosum." The quotation facing the title page is "Mittere autem sanguinem cum sit expeditissimum usum habenti; tamen ignaro difficillimum.—To let blood is extremely easy to an experienced operator, but very difficult to one who is ignorant."

MILITARY INTELLIGENCE.

QUEENSLAND.—His Excellency the Governor directs it to be notified that he has been pleased to appoint Joseph Espie Dods, M.B., to be a Captain in the Queensland Defence Force (Land).

SOUTH AUSTRALIA.—His Excellency the Governor has been pleased to make the following promotions in the S.A. Military Forces:—*Medical Staff Corps*: To be Captains—Lieutenant William John Gething, L.R.C.P.; Lieutenant Leonard Watkins Bickle, F.R.C.S.E.

VICTORIA.—The following appointments have been duly gazetted:—*Medical Staff, Mounted Rifles*: Captain, Frank Ernest Littlewood. Promotion—*Ambulance Corps*: Captain George Horne, M.D., to be Major, to complete establishment. *Victorian Naval Forces*: George Cooke Adams, to be an Honorary Surgeon in the Victorian Naval Forces.

NEW SOUTH WALES.—*Army Nursing Service Reserve*: Miss Ellen Julia Gould, member of the Royal British Nurses' Association, has been appointed Lady Superintendent of Nurses; Miss Julia Bligh Johnstone has been appointed Superintendent. *N.S.W. Army Medical Corps* (Volunteer Establishment): For "George Dundas," in supplement to *Government Gazette* of March 1st, 1899, read "Mordaunt George Dundas."

ODDS AND ENDS.

English *Tit-Bits* has the following in the number for March 4th, 1899. Though "said in jest it is sadly in earnest," as most members of the medical profession in Australia know to their cost:—"Is he a prosperous physician?" "I should say so. He manages to collect nearly half of what is owing to him."

At an out-patient department in a certain Sydney hospital a woman consulted the Medical Officer for pains in her back, and begged him to give her a little *erysipelas* to rub in. She meant *eucalyptus*.

A young girl very nervously stated that she suffered from an *enema*, and when further questioned said "*all my water turns to blood*." She had transposed the terms.

A middle aged woman recently applied for advice, stating that her "*monsoons* had left her for the past three months."

In a country town in New South Wales a Chinaman went to the local medico saying that his partner was dead, and asked for the *stiff ticket*.

A mother once brought her daughter to be treated for thread worms, which she said persisted in spite of an *onu* of salt and water given twice a week.

A woman brought a child suffering with "*aneroide* in the nose."

A Sydney bookseller catalogues "Oliver's Pulse-gauging" under the head of *Engineering Works*.

CLASSIFICATION OF CAUSES OF DEATH.—A pamphlet containing an exposition of the Bertillon classification of causes of death has been issued by the American Public Health Association. This Association, comprising the sanitary officers of Canada, Mexico, and the United States, unanimously recommended the general adoption of this system for mortality reports at its last meeting, as did also the conference of State and Provincial Boards of Health of North America. The System is used in France, and is making progress in Europe and in South America. It is hoped that it may meet with general adoption all over the world in time to begin the mortality statistics of the next century on a uniform basis. To this end an International Commission of Revision, representing all of the countries desiring to employ the classification, will meet in Paris at the time of the International Congress of Hygiene and Demography in 1900. The several National Commissions constituting this body are engaged in ascertaining the wishes of the registrars and users of mortality statistics of their respective countries in regard to the changes which shall be made in the present form, and the present pamphlet is issued chiefly for this purpose. It will be sent, free of expense, to all persons desiring it, and the advice and suggestions of all sanitarians, pathologists, statisticians, and others interested in the subject of statistics of causes of death are earnestly solicited. Requests for the pamphlet and for other information on the subject may be addressed to Dr. Cressy L. Wilbur, Secretary of the U.S. Commission of Revision, Lansing, Mich., U.S.A.

OBITUARY.

ARTHUR WIGLEY BATEMAN, B.A. Oxon., L.R.C.P. et L.R.C.S. Edin. 1875, died at Albion Park, N.S.W., on May 19th, at the age of 54 years. Dr. Bateman, who was a colonist of twenty-one years' standing, formerly practised his profession at Rylstone, and during the past six years at Albion Park. His loss will be deeply felt in the district.

JOHN CUNNINGHAME, M.B., C.M. Edin. 1886, died at Port Chalmers, N.Z., in April last. He was well known and respected in the district, where he had practised for about twelve years.

JOSEPH EATON, M. & L. Mid., R.C.P. Irel., L. & L. Mid., R.C.S.I. 1874, of Copeland, N.S.W., died on June 4th. Deceased, who arrived in the colony about five years ago, practised at Rylstone, N.S.W., before removing to Copeland.

ROBERT MCBURNEY, M.D., L.R.C.P., L.R.C.S. Edin., died at sea, on board the R.M.S. *Moana*, on April 20th. Dr. McBurney had practised at Mackay, Q., for thirty years. He was buried at Samoa.

GEORGE HENRY PHILLIPS, M.R.C.S. Eng., L.R.C.P. Lond. 1882, died on May 16th, at Parramatta, N.S.W., from phthisis. He was formerly a member of the medical staff of the Parramatta District Hospital, and of St. Joseph's Sanatorium, Auburn.

WILLIAM TALBOT CLINDENING, M.R.C.S. Eng. 1862, L.S.A. Lond. 1862, died at Adelaide on Wednesday, June 7th, 1899. The deceased had been Medical Officer to the Asylum for the Destitute and to the State Children's Department of South Australia for many years. (A further notice will appear in our next issue.)

REVIEWS.

SAJOURS'S ANNUAL AND ANALYTICAL CYCLOPEDIA OF PRACTICAL MEDICINE. Vol. II., Parts I. & II. *Second Notice.*

All the articles contained in the second volume have been written by their respective Editors, and the regular system of the work is thus elaborated. The chief aim of the Editor is to facilitate the labour of the busy medical practitioner, and to help investigators and writers in their researches in medical literature.

He further aims at elucidating, through contributions from men of special knowledge and experience in a particular line of diseases, which, owing to their complexity, are not generally understood.

Such names as Dr. William Browning, of Brooklyn, on "Cerebral Hæmorrhage;" Professor Adami, of Montreal, on "Cirrhosis of the Liver;" Professor Rubino, of Naples, on "Cholera;" Professor Graham, of Toronto, on "Cholelithiasis;" Professor Lépine, of Lyons, on "Diabetes;" articles on "Diphtheria," by Drs. Northrup and Bovaird, of New York; Professor Eskridge, of Denver, on "Catalepsy;" Professor Bondurant, of Mobile, on "Chorea;" Dr. Norman Kerr, of London, "Cocainomania;" Dr. Oliver, of Philadelphia, on "Cataract;" Professor Nathan S. Davis, of Chicago, on "Constipation;" Dr. Vickery, of Boston, on "Dilatation of the Heart," should be sufficient guarantee as to the value of the material contained in these volumes. The standard of excellence inaugurated in the first volume has been, we are glad to be able to state, maintained in those now before us, and we heartily endorse the favourable opinion we expressed of this work in our former review, which appeared July number, 1898. The coloured plates and engravings are works of art, and greatly increase the value of the books.

GOLDEN RULES OF SURGICAL PRACTICE. By E. Hurry Fenwick, F.R.C.S. Fifth edition. John Wright and Co., Bristol. Price, 1s.

These are a series of short and epigrammatic rules upon the principles of surgical practice. The author states that whilst questioning dressers and senior students in the routine of casualty and ward work, while he was struck and surprised at the knowledge they possessed in the recent theories of the causation

of disease and of the modern methods of treatment, he was often dismayed to find that they were ignorant of the commonest rules of surgical practice. The production of this little book is the outcome of this experience. Most of the rules contained therein have been gathered from well-known treatises on surgery. We congratulate the author on his compilation of such succinct and yet comprehensive axioms and maxims of surgical procedures.

GOLDEN RULES OF GYNÆCOLOGY. By S. Jervois Aarons, M.D. J. Wright and Co., Bristol. Price, 1s.

This is an admirable little work, published on the same principle as the foregoing, which the author trusts will prove as valuable to the busy practitioner and to students as it has been to himself.

GOLDEN RULES OF OBSTETRIC PRACTICE. By W. E. Fothergill, M.A., B.Sc., M.D. John Wright and Co., Bristol. Price, 1s.

This is yet another series of golden rules upon the very comprehensive subject of obstetrical practice, which will be found very useful not alone to the student but to the practitioner.

TEXT BOOK OF MEDICAL AND PHARMACEUTICAL CHEMISTRY. By Elias H. Bartley, B.S., M.D., Ph.G., Professor of Chemistry and Toxicology in Long Island College Hospital; Dean and Professor of Organic Chemistry in the Brooklyn College of Pharmacy, etc. Fifth edition, revised and enlarged. Philadelphia: P. Blakiston, Sons and Co. Sydney: L. Bruck, 1898.

Here we have a work which, though extremely technical, cannot fail to interest the general practitioner to a high degree. It is the result of the author's experience during many years.

While there are numerous good text-books on Chemistry in the market, the student often complains that they are either too voluminous for his limited time, or contain a large amount of matter not directly bearing upon medical science, or, on the other hand, are too brief to be of any service to him. Professor Bartley's work avoids these extremes, and fills the gap now existing between them.

Part I. deals chiefly with chemical physics.

Part II. with Theoretical Chemistry, Chemical Reactions, etc.

Part III. is devoted to Inorganic Chemistry. Here the various inorganic groups are dealt with at length, and we find descriptions of disinfectants, antiseptics, water analysis, etc.

The fourth part mainly treats of Pharmaceutical Chemistry, and includes ptomanies, toxins, and poisons.

The last part gives us full information on Physiological and Clinical Chemistry. Nutrition, ferments, foods and diet, digestion, milk, and the urine are among the subjects here.

The volume is well illustrated, and an excellent appendix and glossary serve to make the work more complete.

THE MEDICAL ANNUAL AND PRACTITIONERS' INDEX, 1899. Bristol: John Wright & Co.; Sydney: L. Bruck. Price, 7s. 6d. net.

The current issue of the *Medical Annual* is well up to date, and contains an immense amount of practical information on all branches of medical and surgical science. This year there is only one Australian contributor, Dr. D. Hardie of Brisbane, who writes on Dengue Fever, Lead Poisoning, and Tick Fever in cattle. Such articles as these should be interesting to all practitioners in Australia.

Part I. Therapeutics, consists of a Dictionary of New Remedies, and Review of Therapeutic Progress for 1898, by Dr. Wm. Munrell; Practical X-Ray Work (illustrated), by Dr. Norris Wolfenden; and Electro-Therapeutics, by Dr. Rockwell, of New York.

Part II. New Treatment, is a Dictionary of New Treatment in Medicine and Surgery in 1899, by various well-known writers throughout the world. This part is well illustrated by means of coloured plates and photographs. Mr. Samuel G. Shattock continues his valuable atlas of Pathogenic Bacteria.

There are also very interesting articles on Sanitary Science, New Inventions, Improvements in Pharmacy and Dietetic Articles, etc. The *Medical Annual* is too well known to need further recommendation.

MANUAL OF PHYSICAL DIAGNOSIS FOR THE USE OF STUDENTS AND PHYSICIANS. By James Tyson, M.D., Professor of Clinical Medicine in the University of Pennsylvania and Physician to the University Hospital; Physician to the Philadelphia Hospital; Fellow of the College of Physicians of Philadelphia, etc. Third edition. Philadelphia: P. Blakiston, Sons and Co. Sydney: L. Bruck, 1898. Price, 6s.

This little volume, which is now in its third edition, has been extended and improved so as to bring it up to date. Its main characteristics are detailed accounts of the various methods of examination with a view to correct diagnosis. For this purpose it contains excellent chapters on inspection and mensuration, palpation, percussion, auscultation, and the physical signs of abnormal states of the lungs, heart and abdomen. For this purpose the descriptions are supplemented by figures and plates, some of these being coloured.

A very useful appendix contains articles on examination of blood, chemical examination of gastric contents, etc., Röntgen rays, autopsies, etc. This is an excellent little manual.

THE SANITATION OF BRITISH TROOPS IN INDIA.

By E. Carrick Freeman, Captain, R.A.M.C. London: Redman Publishing Co., Ltd., 1899. Price 2s. net.

There can be little doubt that some such book as this must prove invaluable to medical officers while making sanitary inspections, not only in India but elsewhere. It contains well written articles on water, food, milk, barracks, etc., and contains some valuable hints. Although written for Indian medical officers there is much to instruct and edify Government medical officers in the Australian colonies.

CHANGE OF ADDRESS, ETC.

BAKER, Dr., who had charge of Rotorua Sanatorium for some months, has taken up his residence again in Tauranga, N.Z., and resumed practice there.

BEGG, Dr. WM., has removed from Hamilton to Waihalla, Vic.

BREWIS, Dr. A. S., formerly of Hamilton, Waikato, has commenced practice at Huntly, Prov. Auckland, N.Z.

CAROLAN, Dr. J. F., has removed to Paparoa, N.Z. COOPER, Dr. H. E., has commenced practice at Taroom, Q.

GOOD, Dr. A. A., has removed to Opunake, N.Z.

HARVEY, Dr. L. W., late of Grenfell, N.S.W., has entered into partnership with Dr. S. C. Watkins, of Manly, near Sydney, N.S.W.

HAY, Dr. J. F. S., has commenced practice at Walkari, N.Z.

HEARD, Dr. C. W., has removed from Horsham, Vic., to Orange, N.S.W.

HODGES, Dr. G., has removed from Waimate to Port Chalmers, N.Z.

KIRKALDY, Dr. W. B., has left Charleville, Q., having disposed of his practice to Dr. H. L'Estrange.

LAPRAIK, Dr. GEORGE, of Manara, N.Z., has sold his practice in that town, and has entered partnership with Dr. Payne at the Thames.

L'ESTRANGE, Dr. H., late of St. George, Q., has succeeded to the practice of Dr. Kirkaldy, at Charleville, Q.

MACKNIGHT, Dr. W. C., late of Carisbrook, Vic., has removed to Dunedin, N.Z.

MEARES, Dr. A. L. D., has removed from Christchurch to Foxton, N.Z.

PRATT, Dr. E. H. L., has removed from Parramatta, N.S.W., to North Sydney.

PURDY, Dr. JOHN S., a recent arrival, has settled at Hunt, near Wellington, N.Z.

RUTHERFORD, Dr. A. H., has commenced practice at Casino, N.S.W.

SOHLINK, Dr. R. H., of Wodonga, Vic., has gone for a trip to Germany; during his absence Dr. F. Peipers will carry on his practice.

SHIELDS, Dr. O. C. G., has commenced practice at Kyneton, Vic.

THOMAS, Dr. F. M., has removed from Sandringham, Vic., to Emu Bay, Tas.

THORP, Dr. C. G., late of Gladstone, Q., has commenced practice at Clifton Hill, near Melbourne.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced:

- Aitken, Wm., M.B., &c., to be Acting Officer of Health for the City of South Melbourne.
- Begg, Wm., M.B., &c., to be Officer of Health for Waihalla Shire, Vic., *vice* Dr. W. A. Forsyth, resigned.
- Black, E., L.R.O.P. & B. Edin., &c., to act as Principal Medical Officer, Superintendent of Vaccination, and Chairman of the Central Board of Health for West Australia during the absence, on leave, of Dr. T. H. Lovegrove.
- Brewis, A. S., M.D. Univ. Durh., &c., to be a Public Vaccinator for the District of Huntly, N.Z.
- Brown, W. S., M.B.O.S. Eng., &c., to be an Official Visitor to the Hospital for the Insane, Parramatta, N.S.W., *vice* the late Dr. G. H. Phillips.
- Carolus, J. F., M.R.C.S. Eng., &c., to be a Public Vaccinator for the District of Paparoa and Tokatoka, N.Z.
- Chenery, A., M.B.O.S. Eng., &c., to be a Public Vaccinator for South Australia.
- Corlie, C. C., M.D. Ohio, U.S.A., to be Government Medical Officer and Vaccinator for the District of Ballina, N.S.W., *vice* Dr. P. Corlie, resigned.
- Good, H. A., M.R.C.S. Eng., &c., to be a Public Vaccinator for District of Waimate Plains and Opanake, N.Z.
- Graham, C. H., M.B.O.S. Eng., &c., to be Public Vaccinator at Tungamah, Vic., *vice* Dr. A. F. Hepworth, resigned.
- Hasell, G., M.D. Aberd., &c., to be Medical Superintendent of the Lunatic Asylum at Porirua, N.Z.
- Hodges, G., M.B. Edin., &c., to be a Health Officer for Port of Dunedin, N.Z., *vice* the late Dr. John Cunningham; also to be a Public Vaccinator for the District of Port Chalmers, N.Z.
- Jack, A., M.B., &c., to be Acting Official Visitor to the Reception House at Townsville, Q.
- King, T. B., M.D. Edin., &c., to be Medical Superintendent of the Mount View Lunatic Asylum at Wellington.
- Laing, J. A., M.D. Edin., &c., to be a Public Vaccinator for the District of Auckland, N.Z.
- L'Estrange, H., L.R.O.P. & S. Edin., to be Medical Officer at Charleville, Q., *vice* Dr. W. B. Kirkaldy, resigned.
- Lots, H. J., M.R.C.S. Eng., &c., to be a Member of the Board of Management of the Fremantle Hospital, W.A.

Meares, A. L. D., M.R.C.S. Eng., &c., to be a Public Vaccinator for the District of Foxton, N.Z.

Powlett, Dr. T. L., to be Government Medical Officer and Vaccinator at Crookwell, N.S.W., *vice* Dr. E. S. Stokes, resigned.

Smeaton, B. M.B., &c., to be a Public Vaccinator for South Australia.

MEDICAL RESIGNATIONS.

The following Medical Resignations are announced:

Corlie, Dr. P. E., as Government Medical Officer and Vaccinator at Ballina, N.S.W.

Forsyth, W. A., M.B., &c., as Officer of Health for Waihalla Shire, Vic.

Hawthorne, E. S., L. of L.M., K.Q.C.P. Irel., &c., as Medical Officer at Georgetown, Q.

Hepworth, Dr. A. F., as Public Vaccinator at Tungamah, Vic.

Kirkaldy, W. B., M.B., &c., as Medical Officer at Charleville, Q.

Stokes, E. S., M.B. Syd., &c., as Government Medical Officer at Crookwell, N.S.W.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas have been duly registered as legally qualified medical practitioners by the respective boards:—

VICTORIA.

Thorp, Charles Gabourel, M.B. & Ch.M. Edin. 1884.

Shields, Oswald Olive Graeme, M.B. & Ch.B. Melb. 1897.

Boyd, Percival Crawford, L.R.O.P. Edin. 1879, L.R.O.S. Edin. 1879.

Patterson, James Harold, M.B. & Ch.M. Edin. 1897.

SOUTH AUSTRALIA.

Dunn, Spencer Smithson, M.B., C.M. Aberd. 1886.

Goode, Christina Love, M.B. Melb.

NEW ZEALAND.

Crooke, Thomas Lealie, L.R.O.P., L.R.C.S. Edin.

Purdy, John Smith, M.B., C.M., Univ. Aberd. 1898.

Hay, Joseph Frank Strong, M.B., Mast. Surg. Univ. Aberd.

QUEENSLAND.

Larwill, John, Lic. R. Coll. Phys. Edin. 1894, Lic. R. Coll. Surg. Edin. 1894.

Godfrey, Horace Percy, M.B. 1890, B.S. 1891 Univ. Melb., Fell. R. Coll. Surg. Eng. 1894.

Republished.

Cooper, Hugh Erskine, Lic. Soc. Apoth. Lond. 1893. (Registered in Queensland, 1895).

BIRTHS, MARRIAGE, AND DEATHS.

BIRTHS.

GIBBES.—On the 16th May, at Copper-street, Tumut, N.S.W., the wife of A. E. Gibbes, M.B., Ch.B., of a daughter.

YOUNG.—On the 21st May, at 91 Macleay-street, Potts Point, Sydney, the wife of H. C. Taylor Young, M.D., of a son.

MARRIAGE.

WARREN—WOOD.—On the 17th May, at the Pro-Cathedral, Newcastle, N.S.W., by the Lord Bishop of Newcastle, Charles Frank Warren, M.B.O.S., L.R.O.P., L.R.A. (late Surgeon, Royal Navy), of Wagga, N.S.W., eldest son of Charles Warren, of Regent's Park, London, to Muriel Hanneil, second daughter of Joseph Wood, of Woodlands, Newcastle.

DEATHS.

BATEMAN.—On the 19th May, at Albion Park, N.S.W., Dr. Arthur Wigley Bateman, aged 54 years.

PHILLIPS.—On the 16th May, at Parramatta, N.S.W., George Henry Phillips, M.R.C.S., L.R.O.P., aged 61 years.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

PRESIDENTIAL ADDRESS

AT ANNUAL MEETING OF SOUTH AUSTRALIAN
BRANCH OF BRITISH MEDICAL ASSOCIATION.

By H. SWIFT, M.D. CANTAB., ADELAIDE, S.A.

GENTLEMEN,—During the last weeks of my year of office as President of this Branch, I have had ever before me the knowledge that it would be my questionable privilege to deliver a valedictory address. I can safely assert that I am by no means the only occupant of this chair who has eagerly searched for some loophole by which a reasonable excuse for escape might be found, from inflicting upon an audience what almost amounts to a capital offence, viz., the necessity of listening to something that it has heard before, that it probably knows a good deal more about than the speaker, and so it does not wish to hear again. I can lay no claim to originality in this idea, for in at least two instances in my recollection considerable pressure had to be brought to bear before my predecessors could be prevailed upon to see the futility of objecting, and to fall into line. My instincts were too conservative, or mayhap my courage was not sufficient for me to attempt to alter the old order of things by making such a radical change, and so I must pray you to extend to me your most merciful consideration, and to hear me with all the patience you can summon whilst I endeavour to bore you as little as possible in reviewing some of the most noticeable events affecting the medical profession as a whole, and our Branch in particular during my year of office.

Death has claimed but one member during the year. Dr. Clindening was one of the oldest members, and was the fourth president. He was a typical Irishman, and we shall long miss his ever ready flow of eloquence and rich brogue.

You will, I hope, pardon me whilst I allude to the memory of another member of the profession who has gone to his long home, who, although not on our list and not of the same way of thinking on some matters as the majority of us, still was respected and looked up to as one who was ever ready to give his assistance to any charitable institution, and was always trying to alleviate the distress and sufferings of the needy and sick. In the disastrous collision between the Government and the late Honorary Staff of the Hospital,

Dr. Allan Campbell did his utmost with all his great and untiring energy to heal the breach, and, although his efforts were unavailing, still he earned our respectful thanks and earnest good-will. He spent a great deal of time in carrying through the House the new Health Act, some of the chief clauses in the Act being popularly called by his name, which fact a leading member of the Government attempts to refute; as, in a letter in *The Register* of May 9th, he says 'only one clause was added to the infectious diseases part of the Bill by Dr. Campbell. Section 128 provides for the notification of pulmonary tuberculosis, and, as nothing further than mere notification is provided for, this section is of *little importance*.' On May 11th, in another letter replying to one from Dr. Borthwick, he writes: "I have shown that only one of these clauses, *and that not an important one*, was included in the Bill at the instance of Dr. Campbell." Without wishing to set up my opinion against that of such an authority, I have an idea that these clauses, far from turning out to be of no importance—because, I suppose, they were not inserted by the Government—will prove to be the *summa bona* of the Bill, and of far-reaching benefit to the whole populace.

When the reins were handed to me by Dr. Giles the team was well in hand, the coach well balanced, and the road was all clear, but before we had travelled very far an obstruction appeared right in our path, and had to be removed before we could drive ahead. The obstruction took the shape of a letter which one of our members had seen fit to insert in the *Australasian Medical Gazette*, and which was couched in his usual egotistical and self-laudatory style. As he was attempting to pose as a *persona grata*, it was considered necessary by some for the harmony of our meetings that it should be unmistakably demonstrated to him that he was labouring under a delusion. A special meeting was summoned, a vote was taken, the effect desired was accomplished. Since then there have been no further impediments in our path.

Two years ago, Dr. Lendon from this chair enlarged upon the subject of Federation. He hoped that political union throughout Australasia would be an accomplished fact during 1897, and urged the advisability of the Branches of the British Medical Association becoming federated. Political federation is not yet established, although now that the New South Wales people have shown, by a very

good majority, that they wish for it, I suppose it is within measurable distance. So far as I can gather, no steps have been taken either by us or by any of the other Branches in the furtherance of the uniting of the Branches into one large body. I think it is a great pity that the machinery for the development of this scheme should not be set in motion, so that not only should there be one vast Australasian Medical Association for the advancement of medical and allied sciences, and the maintenance of the honour and the interests of the medical profession, but it should also include amongst its aims and objects the defence of any of its members against charges brought against them in their professional capacity. In each of the neighbouring colonies there is already a defence association, and there is not the slightest doubt we ought to have a defence fund in South Australia, which I, for my part, would like to see in connection with the Branch and managed by the council thereof. For the first two or three years, instead of paying an annual subscription of two guineas, we might pay two guineas and a half, the half to go to a defence fund. After that period we should probably find we had a fairly satisfactory reserve fund, and the subscription could be reduced. We medical men in this colony are in a peculiar and unenviable position, and none of us can tell, from day to day, when we may be called upon to defend our reputations against informations no matter how baseless and unfounded. During the past year one of our own members had to defend himself against such a charge, and was put to considerable expense.

Towards the close of 1898 the lay press in England was very full of the deaths of Major C. Lester and Mr. Harold Frederic who had had no medical treatment, but had been under the ministrations of, or as some of the papers put it, been the victims of the Faith-healers. One of these papers went on to say "Almost every week here we read of some otherwise intelligent man or woman who has died because of an insane rejection of the services of any physician, preferring to rely upon the curative power of some mental healer, like the one who led Frederic to the grave and who testified afterwards that Christian science would make her leg sound again if she should break it." In this colony not only have the Faith-healers a happy and fruitful hunting ground, but every quack who will profess he can cure every disease under the sun by the means of some marvellous mystical—or really mythical—remedy, and every high-sounding nostrum that

is sufficiently advertised will have a very large following and will rob the all too confiding public of their hard-earned wages, and not infrequently their life is sacrificed also. The gullibility and credulity of the *οἱ πολλοί* is simply astounding. One would have thought that it would be quite sufficient to read the advertisements of these miraculous cure-all remedies and to hear the reports of these wonderful no-failing quacks for any person of average intelligence and education to conclude that he would not be so foolish as to risk his life or waste his substance. But no; any remedy that is wrapt up in mystery will always appeal to the lay mind and must be invested with peculiar charms. Only the other day a man in England who had been making a large income by selling some powders which were guaranteed to cure almost every disease that was ever heard of, was severely censured only by the jury who had been summoned to the inquest on the body of a man who had died from diabetes whilst being attended by this charlatan. The powders were found to contain nothing but ordinary table salt. One of the most ridiculous, but at the same time very popular, methods adopted by a certain section of society is that of healing one another by faith. Mr. A concentrates his attention on Mrs. B's neuralgia, and says over and over again Mrs. B's neuralgia is gone; Mrs. S feels that Mr. S's gout is relieved, and of course it is. But surely it is time that the public were protected by legislation from this ever increasing army of money-leeches. When we look back on the last few years what a crowd of them there have been who appear, stay a month or two, gather in all the harvest they can with specious pleas and then vanish, leaving behind them some worthless rubbish—if nothing worse—a battery that has cost several pounds and will not work, or a pessary that has cost a guinea and might have been obtained, if necessary, for a few shillings! The only relief from gentlemen of this kidney is, as the *British Medical Journal* puts it, to get an Act passed making it illegal for any person to practice medicine, surgery or midwifery for gain, unless he be duly qualified and registered, and that in the case of repeated offences the court should have the power of inflicting a cumulative penalty. In this colony in 1844 an Act was passed "to define the qualifications of medical practitioners in this province for certain purposes," which is still in force and which simply enacts that no person is a legally qualified medical practitioner unless he has been approved by a medical board. Section III. says

he has to pay a guinea for such. Section IV. enacts what his fees shall be for giving evidence and doing *post mortems*.

In 1880 an Act was passed to repeal Section I. of the 1844 Act, and to insert a fresh ordinance that any person wishing to be deemed a legally qualified medical practitioner must prove that he was possessed of one of the qualifications mentioned in a schedule attached.

In 1889, a further Act was passed to repeal the Schedule of Act 1880 and to insert another, and to add another section which reads:—"Any person who shall falsely pretend to be a legally qualified medical practitioner, or who shall use any spurious diploma or falsely pretend to have or use any diploma as physician, doctor of medicine, licentiate of medicine or surgery, bachelor of medicine, or any other name or title other than that which shall have been *bona fide* granted to him, shall, on conviction for every such offence, forfeit and pay a sum not exceeding fifty pounds. Provided that any person who has heretofore practised medicine or surgery continuously in South Australia for a term of five years shall not be liable to any penalties under this section by reason only of his using or continuing to use the title of doctor." Another clause grants the Medical Board power to cancel or suspend the certificates of legally qualified medical practitioners who shall be convicted of felony or misdemeanour.

These three Acts are taken together as constituting the Medical Act of South Australia, and there is nothing in them to protect the public from being not only fleeced, but also seriously and often permanently damaged in health by the unscrupulous quacks. Tasmania appears to be the only colony that can be congratulated on its Medical Act, for it is fairly full and explicit and the penalties are so severe that the advertising fraternity soon find it is no place for them.

I suppose it would be worse than useless at the present time for us to petition for any alteration, but if only the Government could be induced to bring in a new Act embodying a clause somewhat similar to the one in the Tasmanian Medical Act, it might earn the thanks of even the medical profession. The lawyers are really the law-makers of the country; they have made, I understand, a pretty stringent Act to protect the regularly admitted solicitor. Is it too much to ask them to assist our profession in a similar manner? The Government have deserved the unstinted thanks of the community for bringing into force the

new Health Act, and it has been received with marked and almost unalloyed approval by the medical profession. A few suggestions for the more efficient working of the different clauses were made to the Central Board of Health, and the latter was also asked to obtain the opinion of the Attorney-General on the question of payment for notification of tuberculosis. It was evidently the intention of the persons who drafted the Bill that the notification of tuberculosis should be paid for, for Clause 129 reads:—"The local Board shall pay to every such medical practitioner," etc., the word "such" surely referring to the person in the Clause immediately preceding it. In answer the Honorary Secretary received a reply which can only be described as discourteous in the extreme. The Council did not feel called upon to give the Board a lesson in manners, and so did not reply. The clauses that have given rise to the greatest amount of discussion, and have attracted the most attention, are those which refer to tuberculosis both in the human and the animal subjects. I question whether any epoch in the annals of medicine and surgery has created greater excitement, or given rise to a more widely-spread wave of interest in the minds of the public than has the dissemination of the knowledge that tuberculosis is a communicable and at the same time a preventable disease. It is only within the last twelve or eighteen months that especial attention has been attracted to this subject at home and in the colonies, but in America certain medical men had been working since 1889 to introduce certain precautionary measures, but it was not until 1897 that these were really adopted and put into force.

The most remarkable point about this sudden epidemic of interest in the tuberculosis question is, not that it should have arisen now, but rather that it should not have arisen years ago. Ages ago in some countries, Italy for instance, consumption was held to be contagious. Fifty-four years ago it was known that rabbits could be infected by being inoculated with tubercular material. Villemin, thirty years ago, was led to the conclusion that the infective nature of the disease might be due to the action of a disease germ. Sixteen years ago Koch demonstrated the specific bacillus: and yet for fifteen more years did the fighting spirit of our race, which has ever been in the forefront of battle against disease, lie dormant; but, when once the sleeping lion was aroused, the nation forthwith attacked the enemy with vigour. The enemy is a foeman well worthy of all the energy and skill that can be allied against it, for there

is no disease known to the human race that causes anything like the mortality arising from tuberculosis. It has been asserted that at least one-eleventh of the whole population of the British Isles dies of consumption, and taking all forms of tuberculosis together, that one out of every six deaths is to be attributed to its ravages. In England a National Association for the Prevention of Consumption and other forms of Tuberculosis has been formed, and local branches are being established in all the important towns. The aims and objects of this association are mainly preventive, to teach the public that the disease was no longer to be regarded as a hopeless hereditary development which medical science was powerless to combat; to prove that it was really propagated by the dissemination of a bacillus; and to direct their attention to the best methods of preventing the multiplication and spread of the germ by the strict adherence to absolute cleanliness and disinfection, pure air and lots of it, and plenty of nutritious food.

This is no place to enlarge upon this vast upheaval and radical topsy-turvy of all our most hardly hammered-in teachings and all our most fondly cherished theories about hereditary taint, nor upon the endless arguments that have arisen out of this new conception. I would suggest to the new council that an evening should be set apart to discussing the why and wherefore of these new ideas. Amongst other bones for contention, "how will these new views affect the regulations of life assurance companies?"

In our own colony we are by no means so far behind the times as some writers in the lay press would have their readers believe. As our president-elect pointed out in his interesting paper at the May meeting, the Health Act of 1898 is in advance of any other legislation in regard to tuberculosis. The Act has been in force since January, 1899, and so far as can be concluded from such a short period, any harm that may have arisen from too great officiousness on the part of an over-zealous inspector is far and away counteracted by the benefit derived from the spreading broadcast the information as to how to prevent the disease from extending. I see Sir William Broadbent, at a public meeting at Sheffield on May 10th, remarked: "He confessed that he was dismayed at the idea of the difficulties which would arise if they attempted anything like compulsory notification of consumption." I confess I don't quite see why. It has been for some years, and is still, I believe, in force in America. He went on to say: "By all means

let the certificate of death by consumption be the notification, and let that be acted upon by the disinfection of the rooms in which patients had died of consumption." This looks to me like an instance of the old proverb of locking the stable door after the steed has gone.

At the meeting of the Branch in May the council were requested to take steps to facilitate the more efficient treatment of consumption. The council, as you have already heard this afternoon, resolved that steps should be taken at once to convene a public meeting to discuss the best methods for acquainting the general public with the latest ideas on the infectious character of tuberculosis, and to decide what action should be taken to prevent its spreading." It also appointed a committee, consisting of Drs. Hayward, Gault, Gunson, Marten and Swift, to represent the Branch, and to take all steps necessary to give effect to the resolution. The Bacteriological Institute holds its annual meeting in July, when a paper on this subject will be read by Dr. Cavenagh Mainwaring, and probably your committee will co-operate, and confer with another committee appointed at that meeting.

At last public attention has been directed to the lack of sufficient medical supervision at the Parkside Lunatic Asylum. At an inquest held to enquire into the cause of death of one of the inmates, the jury found that death had been caused by the deceased hanging himself, that no blame was attachable to anyone, and that Dr. Cleland should have some medical assistance in supervising so large a number of patients. Dr. Cleland, in his evidence, said there were 706 patients in the Parkside institution, and he did not know of any other asylum in the world where one medical man had the care of so many patients. Not only was Dr. Cleland the sole medical officer of this vast institution, but in addition he had the oversight of the North Terrace Asylum and was Colonial Surgeon—a position which involved medical oversight of country hospitals. At none of the large asylums in the neighbouring colonies are there less than three residents, with very few more beds. The matter was brought up in the House. The Premier promised to look into the matter and do what was necessary. We presume he did so, as he promised; but, up to the present, we have not heard of the appointment of any assistant to Dr. Cleland. The worry and strain of having the sole and immediate charge of so many lunatics are bound to tell on the health and vitality of any man in time, however strong, and it is a very unfair and

niggardly policy that expects a man to do the work of three.

At the present time, if I were asked what I consider to be the greatest discovery in medicine or surgery during this last decade of the present century, I should not hesitate to declare that the greatest good to the greatest number had been derived from the treatment of diphtheria by antitoxin serum. I said at the present time, for I believe that, in time, the recognition of the infectious character of tuberculosis by means of a specific bacillus, will come to be regarded as the greatest discovery of the age, owing to the large proportion of the human race that will be beneficially affected by this knowledge. On all sides and in every country, almost without exception, the reports and statistics of cases treated by this remedy are not only highly favourable, but are also little short of miraculous. It is, I suppose, inevitable that there must be some few sceptical individuals who will attempt to decry any—as they will call it—new-fangled line of treatment. One of these persons—he could hardly be called a conscientious objector—a one-time member of our Branch, told me, a few weeks ago, that he did not believe in the antitoxin treatment of diphtheria. I asked him if he had ever used it. He said: “No, and he did not intend to, as he could cure diphtheria without its use.” I then asked him what his treatment was. He refused to tell me what drugs he employed but said he would let me have some of the mixture, if I would try it. Of course I would have none of such quackery, but told him I would be only too pleased to try any remedy if I knew what it was. He again declined to tell me, but—trying perhaps to soothe his own conscience—he added that we did not know what antitoxin was. When one of our own fraternity will display such blatant ignorance and quackery to our faces, we are nauseated when we allow our minds to dwell on the methods he must adopt and language he must use in pouring his never-failing drugs down the throats of his gullible patients.

Another individual who poses as an authority upon every conceivable medical subject was recently interviewed by an *Advertiser* reporter and gave vent to some very remarkable subjects.

Question: “Has not the antitoxin serum given splendid results in diphtheria?”

Answer: “There is such a conflict of opinion on this subject that one cannot answer the question one way or the other.”

Question: “Do you use antitoxin serum in the Adelaide Hospital for diphtheria?”

Answer: “We have had all sorts of bad cases during the last two years and a half. We have never used antitoxin, and we have never had a death. We use the antitoxin serum for growing microbes in. It is unequalled for this purpose.”

The only part of this interview which reflects any credit on this person is where he is candid enough to acknowledge his ignorance of the subject, and admit his inability to form any opinion. But when he goes on to say “we have never used antitoxin and we have never had a death,” then we must conclude that either their diagnosis has been greatly at fault, or their good fortune has been phenomenal, or they have employed some method of treatment which has not occurred to the rest of us poor mortals, and which is only vouchsafed to and permitted to be used by such deified individuals, for how otherwise can we be expected to understand the statement “that we never had a death” from a disease which in some hospitals has claimed 70 per cent., 80 per cent, aye, 90 per cent. of those affected. There is another explanation which I will leave to my hearers’ own understanding.

I am at a loss to comprehend the phrase “conflict of opinion.” I cannot call to mind a single adverse report; on the contrary, many most laudatory series of results have appeared in the medical press. As to the remarks about the usefulness of the antitoxin serum for growing microbes in, I am assured by those who are competent to speak on the subject that this remark is only on a par with the rest of his interview, and displays his ignorance of what he is talking about, for although antitoxin serum can undoubtedly be used for the purpose the serum obtained from horses is absolutely just as good, if not preferable, and whereas the cost of each cultivation would in the one case be something over 2s. 6d., in the other it would be *nil*, or certainly not more than one penny. The public have a right to expect that they will be treated in a public institution by the most up-to-date and approved methods, and that a medical man holding such a responsible position as senior resident physician will be cognisant of and ready to use all the latest remedies.

Prior to the discovery of the antitoxin serum, I had always looked upon diphtheria as a malignant and dread disease. Having been connected with children’s hospitals throughout my medical career, I have been brought into close contact with the ravages of this fell fiend. I have seen it treated in all sorts of ways and

with every kind of drug, and nothing has been of any avail—pace, you vaunters of hidden and miraculous cures. But since the antitoxin serum treatment has been introduced, a change has been wrought which is simply marvellous. Dr. Evans, resident medical officer of the Children's Hospital has very kindly and with infinite trouble and energy collected for me statistics of (1st) all the cases of diphtheria treated in the hospital during the three years between January 1st, 1892, and December 31st, 1894, *i.e.*, prior to the use of antitoxin; (2nd) all those admitted during the three years from January 1st, 1896, to December 31st, 1898, when all cases diagnosed and proved by bacteriological examination to be diphtheria have been treated by the injection of antitoxin. The year 1895 has not been included, as some cases were treated with and some without the serum.

1st.—From January 1, 1892, to December 31, 1894, 38 cases were admitted, with 12 deaths. Of these 13 had pharyngeal trouble only, and all recovered: 25 had pharyngeal and laryngeal trouble as well, and 12 died; upon 9 of these tracheotomy had to be performed, and only one recovered. The mortality for all cases admitted was 31·56 per cent. Pharyngeal only, all recovered. Pharyngeal and laryngeal, 48 per cent. died. Of the cases submitted to tracheotomy, 88·8 per cent. died.

2nd.—From January, 1896, to December 31, 1898, 110 cases were treated, with only 7 deaths. Of pharyngeal cases only, there were 90 cases, with 6 deaths; 20 had pharyngeal and laryngeal disease combined, and only 1 died. This child was admitted in a moribund condition, and died in three hours, so really should not be included—but it is.

There were 10 tracheotomies, and they all recovered. Mortality for all cases was 6·36 per cent., *i.e.*, the death rate has been reduced from 36·56 per cent. to 6·36 per cent. Of the pharyngeal cases, 6·6 per cent. died; of the pharyngeal plus laryngeal cases only 5 per cent. died, and, as I have already said, all the tracheotomies recovered.

There is one weak spot in this table of statistics, *viz.*, that not only have many more patients been treated during the latter three years, but also amongst the latter series of cases, many have been included which were of a very mild type, and which formerly, before the age of bacteriological examination, would have been looked upon and treated as cases of tonsillitis, whereas, owing to the limited space available in the old building prior to the erection of the new wards, most of the cases

admitted were of a severe type. But it is when we study the results of the cases that required tracheotomy, we feel we are on firmer ground, for there is no getting away from the plain statements, that in both series only those patients were operated upon who were *in extremis*, and in both series the same medical men were in attendance, and yet in the one lot all but one die, whereas in the other all live. I certainly cannot remember, nor can I find any record of an unbroken succession of 10 recoveries after tracheotomy for laryngeal diphtheria. One leading surgeon in a neighbouring colony related a series of 50 unsuccessful operations. I had become so disheartened by the invariable result of the operation that I had almost decided to discard it, but noticing the remarkable benefit derived from the injection of the antitoxin serum it appeared that if the patient could be kept alive for a few hours, until the serum had had time to work, a recovery might be possible. In my first case of recovery after the first few hours of relief from the dyspnoea, to my great disappointment I noticed the same old disheartening symptoms appearing, which portended extension of membrane and a fatal termination, but pouring in more antitoxin, after a few more hours of grave anxiety the child showed some slight signs of improvement, and ultimately recovered completely.

I feel absolutely certain, in my own mind, that had it not been for the serum treatment the great majority—if not all—of these recoveries would have had to be recorded as fatalities instead. Before the use of antitoxin the records in the case books show that it was no uncommon occurrence for cases which were pharyngeal only on admission, to become laryngeal and die. Since the new treatment has been in vogue I cannot remember an instance of this, and the sister of the hospital, who has taken the deepest interest in the employment of this remedy, confirms my opinion. Not only do the patients themselves derive the benefit of this discovery, but the relief to the feelings of the friends, the medical attendants, and the nurses, is immense. Formerly, as Sister Hill remarks, it was perfect agony to have to nurse a laryngeal case, with all its accompanying harrowing scenes; now, instead of looking forward with dread to a distressing termination, they are buoyed up with the almost certain hope, that however ill the patient may be, a recovery may be confidently expected.

I thank you, gentlemen, for your courtesy and patience in listening to my address.

Before vacating this chair I wish to thank all the members of the Branch for their cordial support and unquestioning obedience to the ruling of their president. To the members of the council I am sincerely grateful for their most able advice, their hearty co-operation, and for the general harmony and unimpaired good feeling that has permeated our sittings.

And lastly, I congratulate our honorary secretary and navigator, Dr. Hayward, that he has so skilfully steered our good ship that she has escaped all shoals, visible or hidden, that there are no breaches in our bulwarks, and that our coffers are not depleted.

FURTHER NOTES ON TYPHOID.

By J. W. SPRINGTHORPE, M.A., M.D., M.R.C.P.,
PHYSICIAN TO THE MELBOURNE HOSPITAL.

(a) *An unsuccessful experiment.*

In the course of an investigation some years ago upon the influence of certain species of *saccharomyces* upon the typhoid bacillus, M. de Bavay found that one of the effects upon the typho toxine was that it became soluble, and passed through a Pasteur filter. The special acid, which the yeast constantly produced, remains still undetermined, and, in addition, several enzymes are present, whose special action cannot be definitely stated. But the results raised the question whether the alteration (from insolubility to solubility) of the typhoid poison might not be due to the acidification of the medium; and suggested that such alteration might possibly produce a local vaccination of the bowel against the extension of the typhoid ulceration, and so prevent relapses as well as limit the attack itself (with some probable initial, possibly dangerous though transient, increase in the symptoms due to toxæmia). In view of the importance of the question it was decided to put it to the test, always, of course, under conditions and to an extent that would make the risk practically nil. In one of the lactic acid type of bacteria, the bacillus *longissimus acidii lactici*, obtained by him, probably, for the first time in a state of pure culture, M. de Bavay found an organism capable of producing a definite acidity (up to one per cent.) in any liquid containing fermentable sugar (especially in one faintly acid) and which, also, had a remarkable power in killing off other germs, including the typhoid bacillus. And in the sterilised malt extract, which he has made for me, and which I have used for some four years past, we had a suitable

medium in which to cultivate and introduce it. Accordingly in December last when our typhoid patients were coming into hospital in large numbers, I made trial of this new method of dieting patients on a food containing a pure culture of a hostile organism.

Case I. was a young man, aged 17, suffering from a typical but mild attack. He had typhoid spots, his blood gave the Widal reaction, he had reached the end of his second week, and the temperature was coming down characteristically. On the ninth day after admission, and about the twenty-third of his fever, he was put on the new food, and remained upon it for thirteen days. He did not sleep as well as before, but there were no signs of any increased toxæmia, and five days later he began and went through a typical relapse, as shown on his chart. The stools, however, became acid to both litmus paper and phenol thallin.

Case II. was a young man, aged 25, also suffering from typical typhoid (Widal reaction, etc.). He, also, had been admitted at the end of his second week, with a medium temperature course, descending characteristically, but on the nineteenth and twenty-first days he had two slight hæmorrhages of one and a-half and six ounces of blood. Four days subsequently, with slightly rising temperature, he was put upon the new food, but again placed upon the ordinary sterilised malt three days later, because of three small hæmorrhages and slight abdominal distension. Here, again, there were no signs of toxæmia, and the new food did not prevent hæmorrhage as the acidity, the acid feces, might have suggested. The case went through what was practically a relapse with several more small bleedings, the fever lasting in all some forty-six days, and ending in recovery.

Case III. was a young man, age 20, also a typical case of typhoid, some sixteen days feverish before admission, with a typically falling temperature, slime, sloughs, and a trace of blood in the stools. On the twenty-first day of his attack he was placed upon the new food, and kept upon it for a fortnight. His temperature came down normally, his stools were acid, and contained occasional slime, sloughs, and a trace of blood, and from them the bacillus *longissimus acidii lactici* was obtained and cultivated. But about the thirteenth day of his attack, he began and went through a mild relapse of eighteen days, though he was still on the new food during the first five days.

For more detailed information, I send round notes and charts of the different cases. The

series, though small, suffices to show that, at any rate, where the disease has had a fortnight's start, such production of lactic acid in a suitable food has no appreciable local or general effect.

(b) *The germ factor*

Jenner's clinical differentiation of typhoid from typhus fever (though apparently later than similar work in America by Gerhard and others) is generally accepted as marking an era in intestinal pathology. But it has been only the starting point for wider discrimination, especially since clinical medicine and pathology have been rendered more accurate by bacteriology. Personally, I can claim to have given the matter continuous attention for some time past. Twelve years ago my hospital experience made me first acquainted with the differences and discrepancies, both clinical, pathological and bacteriological, in our local outbreaks. Thus our local epidemic of influenza, from 1885 onwards, then suggested that the influenzal germ, and not the typhoid, was responsible for cases of intestinal fever, often regarded as typhoid (Transactions of the Intercolonial Medical Congress, 2nd session, page 174); and subsequent bacteriological investigation produced the germ. How much of the "bilious fever" of the early colonial days was really influenzal will always remain problematical. Further inquiry supported the contention that many cases of so-called typhoid with sudden onset, marked toxæmia, and cerebral symptoms, small spleen, and implication of the large bowel, as well as solitary glands generally, were due to an organism (first described by M. de Bavay, in a paper on "*Saccharomyces* and their influence on Typhoid Fever" in 1892), which differed from the bacillus of Eberth, in secreting a much more poisonous toxin of an albumose nature, as well as morphologically. Again, in certain hæmorrhagic cases an organism was found in the spleen in pure culture, in many ways resembling the bacillus of malignant œdema (*A.M.J.*, Nov., 1894). It was interesting to find the same repeated in Paris by M. Roux, and still more interesting now to find a similar, if not identical, organism described by Klein as the aerobic bacillus of malignant œdema (Hewlett's "*Manual of Bacteriology*," 1898, page 242) among the pathogenic modifications of the colon.

Of late years, however, investigation has proceeded widely along two special lines—(a) pseudo typhoid bacilli, found in water, and (b) modifications of the colon bacillus.

The former recalls to mind our local battle regarding the presence of typhoid germs in our metropolitan water supply; when M. de Bavay found, in different parts of our reticulation, germs answering to all the then known tests for typhoid, and Dr. Katz, from Sydney, after long examination, pronounced them "indistinguishable from typhoid." More recently still, in "*Annales de l'Inst. Pasteur*, 1897," Cassebat reports the finding in the water supply of Marseilles of three so-called "pseudo-typhoid bacilli," which are more fully described in the appended table, and which very closely resemble the bacillus typhosus without apparently being identical therewith. It is with modifications of the colon, however, that bacillus, so widely distributed throughout nature, and constantly present in the intestine of man and the lower animals, that most of the recent work has been done. Thus, in "*Annales de l'Inst. Pasteur*," 1896, page 242, Retik describes five types, or varieties, of the normal colon isolated from water, and characterised by their differences in relation to lactose milk, and the Widal reaction, and yet agreeing with colon in motility, growth on potato, small number of flagella, and rapid, profuse growth, on certain media. And in Hewlett's "*Manual of Bacteriology*," page 242, the following instances are quoted as pathological variations of the colon, though differently described by different observers, viz., the bacillus lactis aerogenes, found by Escherich in the intestine of infants, the bacillus enteritidis of Gärtner, the bacillus cavicida of Bruger, the bacillus neapolitanus of Emmerich (from some cases of "cholera"), Klein's aerobic bacillus of malignant œdema already referred to, and his bacillus of the Middlebrough pneumonia, as well as the bacillus in his meat poisoning cases at Portsmouth.

The prominence and value of the Widal test for typhoid, and the finding by M. de Bavay of a suspicious organism in the Yan Yean last November, led to further local investigation. That it might be quite up to date, I obtained for him, through the kindness of Drs. Grasswell and Cherry, the series of tests given as diagnostic in Hewlett's manual, and by way of contrast and control, M. de Bavay resuscitated a culture that in November, 1897, had been obtained from the spleen of a so-called typhoid, and which, unfortunately, I was unable to trace clinically, or pathologically, but which had been used by him, as well as at the Melbourne Hospital, and I believe the University, for the Widal test in the 1897-8 epidemic, and had given good reactions with (?) typhoid blood.

THE RESULTS OF THE EXAMINATION ARE COLLATED IN THE FOLLOWING TABLE, IN WHICH THEY ARE CONTRASTED WITH THE RESULTS IN TYPICAL TYPHOID AND COLON CASES RESPECTIVELY.

Germ.	Morphology.	Flagella.	Motility.	Colonies, gelatin plates.	22° C. Surface Culture.	Culture gelatin slants.	36° gelatin at 36° for 48 h. (Klein)	Acid Potato.	Milk.	Broth culture.	Broth and 3% pre-sent.	Broth and Formalin.	Reaction with typhoid serum.
Bacillus Typhosus	Well marked rod, 5 or 6 times as long as broad, with larger individual and thread forms	Long and wavy 18-20	Actively motile	Small, roundish granular, brownish by transmitted light	Grayish growth, small, almost confined to needle track. Medium, clear.	No gas	The melted gelatin uniformly turbid	Grayish thin in visible film	No coagulation	General turbidity. No film formation. No Indol reaction	No growth	17,000 No growth	Positive
Colon Bacillus	Short rod, 2 or 3 times as long as broad. Often ovoid. Longer and involution forms, but not so frequent as in typhoid.	Shorter 2-10	Feebly motile	Round or oval, brownish surface, colonies a grayish expansion with furrowed surface, and crinkled margin much larger than typhoid	Grayish growth, spreading widely, nearly covering the surface with crinkled edges. Medium, usually cloudy near growth.	Many gas bubbles form	The melted gelatin remains clear with a thick pellicle on the surface	Straw or yellow, brown, thick slimy growth	Curdled in 1-3 days	General turbidity. No film. Indol reaction with nitrite in 24-48 hours	Grows well	Grows well	Negative
Germ from spleen of Yau Yau	Rods rather short. Thread forms scarce	Long and wavy up to 15	Actively motile	As Eberth	As Eberth, but six weeks later found by Dr. Bull to be more like colon.	No gas for 6 weeks, but then gas found	Melted gelatin uniformly turbid	As Eberth	No coagulation after 3 weeks	Some time slight film on side of tube. General turbidity. No Indol reaction	No growth	No growth	Reaction, but not complete
Germ from spleen of so-called typhoid 11/11/97	Rods longer and thinner, like Eberth	Not tested	Not so motile	Similar, but smaller	The same as Eberth	No gas, colonies a little smaller	Remained clear, with thick pellicle on surface	Visible yellowish film	Coagulated in 4 days	Same	No growth	No growth	Quite lost its reactive power. When first used reaction had been good

The other tests of the *Chaselebat* pseudo-typhoid were with coloured sterilized milk.

The results were interesting, as well as somewhat unexpected. Neither gave results typical of either typhoid or colon bacillus, but as examination will show the Yan Yean germ was more like the typhoid than that from the spleen, and certainly was not a colon bacillus according to the tests; whilst the germ from the spleen certainly was not a true typhoid but in many ways resembled the colon, and was like Cassedebat's No. 3 pseudo-typhoid in growing well on carbolised broth at 42° C., and giving on potato after twenty-four hours a yellow, brownish growth like that of the colon. But it is the general bearing of the results that is important. They certainly show the difficulty, if not impossibility, of practically separating certain varieties of colon and typhoid bacilli, and support the contention that there is no ultimate difference between the two. Unless other organisms were present in the spleen case, but not isolated, they also show that a modification in many ways like the colon may be associated with an intestinal attack that pathologists term typhoid. They, also, show that organisms in many ways more like typhoid than colon may be present in one water supply at a time when typhoid, owing to climatic conditions, and others less easy to formulate, was singularly absent. They also show that such organisms from such spleens give reactions which are accepted as typical in cases of undoubted typhoid fever, and that after a time they lose their reactive power. Unfortunately, too, they throw a doubt upon the reliability of the Widal reaction as a means of distinguishing true typhoid from allied forms of disease. All the work that Dr. Officer and myself laboriously went through during the last epidemic, and which was given as supporting the conclusion that many mild and unnoticed attacks were really typhoidal, is thus vitiated, and will require to be done over again. They explain, also, the cases which occasionally occur in which the blood of patients with proven appendicitis, dysenteric diarrhoea, and similar colon infection is reported as having given a good reaction. Thus, if clinicians are to get the certainty from the test that was anticipated and claimed, there must be certainty as to the position of the germ used for the culture, and some accepted standard of reaction. And though, also, such certainty may be impossible, still it is only fair to say that our University and hospital authorities are taking every known precaution to ensure reliability. Thus absence of reaction still has the great negative value originally claimed for it, whilst typical reaction properly interjected, with a known organism,

has a value that may be accepted for all practical purposes.

This inter-connection of the colon and typhoid germs also gives a new significance to the *de novo* theory of typhoid attack. It becomes even more possible than was once supposed, that the organism originating the disease may not have been introduced from without, but, lying latent in the intestine, have become pathogenic under favourable conditions. The danger attendant on the dry methods of storage, removal and disposal of excreta is thus recognised as even greater than was supposed, and the extension of the water carriage system with final innocuous disposal far away from habitations and water supply becomes the more imperatively necessary.

THE EPIDEMICS OF 1898.

(From notes taken during six months, May to October.)

By WALTER SPENCER, M.D., ENMORE, N.S.W.

[This paper comes belated from last year, when interest in the subject was vivid. Certain interesting problems remain still unsolved, which will again confront us; therefore, a review by anyone who has had sufficient material from which to generalise, will not be waste of time.]

Two hundred and thirty-one cases of measles and 147 of rubella were treated. The greatest prevalence was in August. Accuracy cannot be claimed for the relative proportion of the figures, for doubtful cases of each showed such resemblance that the immediate opinion required by anxious parents upon a first inspection must remain doubtful also. I act on the presumption that they are distinct diseases, although there is a close family likeness which seems to me to differ only in degree of prolongation and severity. I was usually called too late to discover the early sign of Koplik, which was present, however, in two instances. Buccal eruptions without the central efflorescence, were not uncommonly present in both complaints. Measles assumed a severer preliminary catarrh and more persistent bronchial irritation than the parody afforded by rubella. A peculiar offensive odour was stronger in measles. Enlargement of superficial lymphatic glands was common to both. Measles spots bequeathed a brownish, those of rubella a yellowish tinge. Both were apt to involve branny desquamation. The tendency of the measles rash to crescentic arrangement was not always obvious, and a slight imitation of the same did not, to my mind, negative

rubella. The absence of comprehensive erythematous blushes, of sustained faucial inflammation, and the mild constitutional symptoms may serve to distinguish rubella from scarlatina, but in cases where the latter is reported to be raging next door, relatives become indignant at the unimportance of the diagnosis, point derisively to the desquamation of both and at their medical adviser, the finger of scorn.

In measles I was impressed with the nocturnal delirium (two or three nights), the obstinate vomiting (four to thirty hours), the diarrhoea (six to twenty-four hours); in rubella with the enlargement of suboccipital glands and the itching of desquamation. Both strongly predisposed to other infections. To publish notes of anomalous cases would, in view of the conflicting testimony of experts, make confusion worse confounded. Diagnosis, which is urged in the interests of the public health, is already impeded by definitions that define only discord. Taking descriptions of rubella for example: Squire says its rash is the brighter, Taylor and McCall Anderson that it is the paler, Colquhoun (*Australasian Medical Gazette*, September, 1898) describes it as purple blotches, as deep red, dark crimson or fine red papules; Squire and others say that these coalesce, Taylor denies it. As to the initial seat of the eruption authors disagree. Branny desquamation following both is admitted by Taylor; in rubella McCall Anderson deems it to be not uncommon, Aitken thinks it is the rule, but Squire makes its absence pathognomic. The occurrence of desquamation in Dr. Colquhoun's cases is remarkable, inasmuch as he found that Squire's description best fitted the Dunedin epidemic. The more we read the more we are bewildered. *Quot homines tot sententiae*.

But the testimony put forward in support and in denial of characteristic features is not on that account to be discredited; from my own notes I could select confirmation of each opposite assertion. Each series of observations is *bona-fide* and no doubt correct. A disease cannot be excluded because of the absence of a diagnostic sign. Comparison from a list of symptoms may mislead; their relative value, their relations, modifications and progress must be estimated on the merits of heredity, previous history, idiosyncrasy, epidemic constitution of the period, climate, and environment as factors in each case.

Signs and symptoms become intelligible only when considered as expressions of a struggle

against toxins. Eruption on the buccal mucosa heralds irritation of continuous tissue along the respiratory and alimentary tracts, whose consequences, cough, vomiting, purging, etc., etc., naturally follow. The type of rash will vary with the conditions of the epidermis and of the vasco-motor nerve disturbance, its colour be modified by the complexion, a point which was well illustrated in Maori and mulatto patients. The lighter the complexion the brighter the rash. Enlargement of glands will result from conveyance of morbid products, and it is not surprising when the first shock falls upon the upper respiratory tract that the nearest lymphatics should be soonest and most often affected. Desquamation will ensue in any case when nutrition of the epidermis has been sufficiently interfered with; I have seen it follow an eruption which appeared to have been caused by phenazone. Desquamation renders the skin more susceptible to other eruptions, especially to urticaria and the erythematata, sometimes herpes and pemphigus. An epidemic of a new description of skin disease among sucklings (which has been recorded elsewhere) was observed by me following the outbreak of measles and rubella. Two infants were born with it though the mothers escaped, a phenomenon which has been before observed of variola, varicella and vaccinia, but not of morbilli.

Twenty-eight of my measles cases were adults. Seven of them claimed to have had it before. Twenty-nine cases were classed as second attacks in children, thirteen of whom I attended for their first in 1893. I have no notes of any second attack of rubella, unless relapses can be so considered. I had several cases of measles and rubella treated in the same wards without any patients who were suffering from one contracting the other.

This record is not compatible with the proposition "that one attack of an eruptive fever entails immunity from a second of the same during childhood," the tenor of which implies that the special pabulum used up during the attack cannot be reconstituted for the sustenance of another during the interval between childhood and adolescence. A more definite estimate is desirable, as, according to this, the term of years will evidently depend upon the age of each patient. If rubella be a mild variety of measles then, although a nice discrimination will be less important, it will still not harmonise with Duke's law whilst that is maintained unmodified and absolute. Reviewing my own limited experience, I think certain other propositions might be formulated.

1. That the signs and symptoms ascribed to measles and rubella are common to both, that any of them may be absent or modified, but that in measles they are more prolonged and of more severity.
2. That measles or rubella may be expected to confer immunity against itself, but does not invariably fulfil the expectation.
3. That second attacks of measles in childhood are milder than the first.
4. That Duke's law is consequently not absolute, being subject to limitations which are as yet imperfectly understood.

An attenuated virus or a mild infection may not confer immunity, individuals may be sometimes susceptible and sometimes refractory. Imperfectly vaccinated children have contracted variola, vaccination in less than four places being held to confer only partial immunity. Moreover, certain pathogenic micro-organisms are found to undergo morphological evolution. Rubella may be an expression of the immature agent of measles not exhausting the same pabulum.

These suggestions may continue to afford foundation for plausible hypotheses concerning measles and rubella until pathology shall have spoken the last word.

A few years may elapse ere return of the foregoing, but scarlatina, diphtheria and enteric fever seem to be endemic until perfection of sanitation and isolation of first cases can be thoroughly carried out. Varicella and pertussis appear to be sporadic, showing preference for seasons under climatic and telluric influences; but influenza, epidemic, endemic, pandemic and contagious, is independent of sanitation as of season, and under existing conditions is beyond the reach of prophylaxis.

For seven years I have seen it every week. During the six months I had 268 cases, with its greatest incidence immediately prior to the greatest incidence of measles in July.

For diagnosis I have been led to place most reliance upon the sign of *Faisan*, that bluish-white porcelain-like glaze upon the tongue, sometimes shining and moist, sometimes resembling a mosaic made with cones of sardonyx, showing that the infiltration does not dip deep enough into the papillæ to hide their red bases. This opaline film cannot be scraped off. It may be partially or wholly obscured by fur, but when visible it is diagnostic. It exists for a variable period, during which there is liability to relapse. Lumbago, sudden pleurodynia, attacks of diarrhoea with vomiting and complaints which might arise from various causes, when accompanied by this sign have their origin revealed.

A puzzling complication of the ordinary variety was the onset of hepatic congestion and severe gastro-enteritis twenty-four hours after apparent convalescence. Fur then entirely obscured the sardonyx sign.

Some relapses after the common variety were as severe as the original attack.

The gastric variety was much more prevalent than formerly, and was usually ushered in by intractable emesis.

It predisposed not only to other diseases, but also to its own recurrence. I had patients suffer from three successive attacks at intervals of about a month. Several have had it regularly twice or thrice a year. Urticaria and erythemata often followed it, and in children it seemed to invite scarlatina, measles and rubella.

Its relentless search into weak spots and furious attacks upon impaired organs render it one of the most obnoxious ailments of our day.

I treated three cases of intermittent fever in St. Peter's. They yielded readily to quinine. In low-lying cottages bordering on the Sydenham swamps I had two cases which appeared to me a mild form of dengue, although neither of them had been out of the colony. They had prostration and arthritic pains which I at first thought must be influenzal (though Faisan's sign was absent); a transient general erythematous eruption, forty-eight hours pyrexia not exceeding 102°, a remission of pains and fever, then a secondary eruption of dusky blotches and painful nodules like blind boils upon the limbs, together with metastatic arthritic pains; which all terminated in fourteen days without swelling or desquamation.

Increasing and more rapid intercommunication between Australia and Asiatic ports may in time introduce to our notice other tropical diseases. Beri-beri and leprosy we know. I have treated two mild cases of psilosis; and conclude by expressing the fervent hope that we may never be called upon to treat the bubonic plague.

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CASE OF CHOLEDOCHOTOMY.

BY RALPH WORRELL, M.D., HON. SURGEON TO
THE DEPARTMENT FOR WOMEN AT THE
SYDNEY HOSPITAL.

THE following case is, I think, of sufficient rarity and interest to warrant my laying it before you.

On January 9th, 1899, I was called to see Mrs. D., *æt.* 44, who had been suffering from jaundice for six weeks. The previous history was as follows:—She had always enjoyed good health until three years before, when she was seized with severe biliary colic which was followed by jaundice, lasting three weeks. Between this attack and the one which occurred six weeks prior to my seeing her, there had been a number of minor attacks which, according to the patient, were not attended with any jaundice. The present attack began with very severe pain, vomiting and prostration, and was soon followed by intense jaundice. During the last few weeks there have been several rigors, and sweating has been marked. The temperature has ranged from 100° to 102°, and the pulse from 100 to 116.

Present Condition.—The patient is stout, deeply jaundiced, the stools are "pipe clay" in appearance, the urine contains bile. The abdomen is fat and distended, and there is marked tenderness and rigidity in the epigastric region, most pronounced midway between the umbilicus and the ensiform cartilage, but no enlargement of the gall bladder can be made out.

Taking into consideration the history of biliary colic, the general appearance of the patient, the intensity of the jaundice and the absence of any tumour of the gall bladder, I came to the conclusion I had to deal with a stone in the common duct, and not with malignant disease. The patient was transferred to Miss Bendett's private hospital, and ordered chloride of calcium, gr. xv., every four hours.

Abdominal section was done on January 18th, 1899, by a vertical incision in the right Langenbuch's line, necessary increased room being obtained by a short transverse cut to the left. The gall bladder was found tucked up underneath the liver, markedly contracted and immovably fixed by adhesions. It was packed with a number (30) of small stones which made it impossible to remove by the aspirator the small quantity of thick bile and mucus which it contained. A small incision into the fundus of the bladder was made, the

fluid contents evacuated on to sponges, and the stones scooped out with a curette. On tracing downwards the ducts, a stone much larger than those in the bladder and cystic duct was detected in the common duct; it was firmly fixed and could be pushed neither forward nor back, nor crushed by the finger and thumb. The duct was therefore incised, and this stone extracted with forceps. Through the opening made, a fine glass nozzle was inserted, and the duct flushed out with saline solution upwards and downwards. The opening was then carefully closed with fine silk sutures passed by means of a vesico-vaginal fistula needle, which greatly facilitated this procedure, made extremely difficult by the depth and fixation of the duct. A thick fold of sterilised gauze was packed around the wounded part so as to isolate it from the general peritoneal cavity and, as an additional safeguard, a large rubber drainage tube was inserted into the right kidney pouch and brought out through an opening in the loin. The peritoneum and sub-peritoneal tissue were then tucked down and sutured with catgut to the contracted gall bladder, into which a small drainage tube was inserted.

The patient bore the operation well, and was put in bed with a pulse of 100. The temperature fell directly, and, excepting on the fifth day, when the gauze was removed and it ran up to 101°, it ranged between 99° and 100° until the normal line was reached on the thirteenth day. There was also an immediate amelioration in the other symptoms, the vomiting ceasing and the rigors being conspicuous by their absence. The gauze and the loin drainage tube were removed on the fifth day, and the drainage tube in gall bladder on the sixteenth day. Bile appeared in the motions at once, although it did not disappear from the urine for nearly three weeks, and the icteric tinge of skin and conjunctivæ took six weeks to gradually fade away.

The patient left the hospital on Feb. 28th, just forty-one days after operation, perfectly well and with the sinus closed. Two weeks afterwards there was pain in the wound and slight pyrexia, for which the sinus was opened up, and a small quantity of pus evacuated. It closed again in a few days, and since then she has had no further trouble.

The first successful case of choledochotomy was performed by Courvoisier in 1890, and since then several surgeons have recorded a short series of cases. In all the mortality rate has been high, varying from 16 to 37 per cent. Mayo Robson says "this is the most difficult

and prolonged of the operations upon the bile ducts, and the mortality is necessarily greater." He himself in a total of 170 operations upon the bile ducts, has only found it necessary to resort to this procedure six times and has had one death. If pushing the stone backwards into the gall bladder or forwards into the duodenum, and crushing the stone with the fingers are impracticable as in this instance, there are yet other alternatives to choledochotomy which may be resorted to. These are: (1) Needling the stone through the walls of the duct. This has been shown to be very dangerous and is now generally discredited. (2) Choledochoduodenostomy, or reaching the stones through the opened duodenum. This may have to be done if the stone lies impacted in the duodenal end of the duct. (3) Cholecystenterostomy, or short-circuiting the obstruction. This is favored by Murphy, of Chicago, in preference to choledochotomy, but I do not think many will agree with him. It is, however, the only course open to us in cases of permanent and irremovable obstructions in the common duct.

SOME OF THE RARER FORMS OF EYE DISEASE.

BY G. H. HOGG, M.D., LAUNCESTON, TASMANIA.

READ BEFORE THE MEDICAL SECTION OF THE ROYAL SOCIETY OF TASMANIA.

I HAVE ventured to bring before your notice this evening some of the less common diseased conditions of the eye which I have met with in the last few years, thinking that as the infrequency of their occurrence might have rendered them unfamiliar, this might serve as my excuse.

The first case which I show you is one of congenital malformation of the eye—polycoria—or the existence of more than one pupil or opening in the iris. (See Fig. A. and A1.)

In the left eye of this child the iris was of a light blue colour, with streaks of a still lighter tinge, there were patches of a muddy brown colour in it in which were black spaces where the iris was deficient, and where the black appearance of a pupil was seen. There were three such well marked and fairly large gaps in the iris which were of somewhat triangular shape with the apex towards the centre of the pupil proper. Through these gaps the bright fundus glow was readily observed with the ophthalmoscope. There were, in addition, two small linear slits in the iris through which a

faint fundus glow appeared. Altogether, therefore, in this eye there existed six pupils, viz.:

1. Central pupil.
2. Three large eccentric pupils.
3. Two small eccentric pupils.

The central pupil was somewhat pear-shaped. It dilated considerably with atropine, although not nearly as much as a normal one owing to the posterior synechiæ which were present.

In the right eye the iris was light blue, with streaks here and there of a still fainter tinge and patches of a muddy brown colour. No distinct gaps existed, however, in the iris of this eye, but here and there were dull blackish spots where the iris was very thin, and through one of these a faint fundus glow was seen with the ophthalmoscope. Posterior synechiæ existed in this eye likewise, but the pupil dilated more extensively than that of the left eye.

The explanation of this peculiar condition was that an iritis had developed in intra-uterine life which had not only brought about adhesions to the lens causing the posterior synechiæ, but had also impaired the vitality of the iris, causing it to become thinned and atrophied in places. As the eye developed with the growth of the foetus there had been more and more dragging on the atrophic iris, as a result of which rents had occurred in the iris of the left eye, while in the right eye the process had not gone so far.

Polycoria is of rare occurrence, and may be classified according to its causal conditions.

- (1.) Polycoria, due to the persistence of a pupillary membrane dividing the pupil.
- (2.) Polycoria due to the existence of "coloboma with a bridge," in which a coloboma of the iris exists while a band of tissue (usually pupillary membrane) stretches across the opening dividing it into two.
- (3.) Polycoria due to congenital irido-dialysis, in which the abnormal pupils are situated at the periphery, where the iris is separated from its insertion.
- (4.) Polycoria due to intra-uterine iritis, causing thinning and atrophy of the iris, with the subsequent development of rents therein.

The second case to which I draw your attention is that of a metastatic carcinoma of the choroid detaching the retina, and I am fortunate enough to be able to show you not only a representation of the ophthalmoscopic appearance, but also the eye after enucleation. (See Fig. B. and B1.)

The patient was a woman of about 70 years of age, and first consulted me for failure of vision in the right eye.

Fig. A.



Fig. A1.



Fig. B.



Fig.

Fig. D.

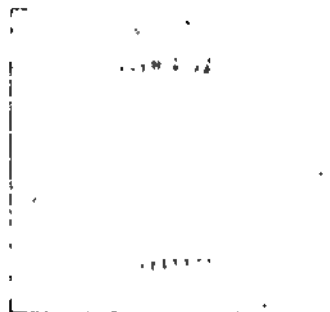


Fig. C.



Fig. E.

FIGURES ILLUSTRATING
DR. HOGG'S PAPER.

Examination revealed that V = T n. hand movements. The pupil was somewhat larger than that of the left eye, while with the ophthalmoscope an extensive retinal detachment was seen, as represented in the diagram.

On further examination it was elicited that the patient had an ulcerating scirrhus of the breast, with enlarged glands, and a metastatic carcinoma of the choroid was diagnosed.

In a fortnight the vision diminished to perception of light, the tension increased to T +, and the pupil became slightly more dilated and lost all reaction to light; attacks of orbital and supra-orbital pain developing, enucleation was advised and carried out.

The appearance of the eye is seen in the jelly preparation, and is represented in the diagram shown. The growth was thin and shell-like, and extended far forwards in the eye; it was of a faint pinkish yellow colour, and proved on microscopic examination to be a carcinoma.

While sarcoma of the choroid is the commonest form of intra-ocular growth in adult life, carcinoma, which is always of metastatic origin, is exceedingly rare. Professor Schobl, of Prague, in his large clinical experience, mentions only one case which he had met with, and Hill Griffith states that only some fifteen cases in all had been recorded.

Case III. is that of a child suffering from sympathetic ophthalmia of nine months' duration, caused by a neglected perforating wound of the other eye.

Although the disease can hardly be called rare, the peculiar appearance of the eye might, I thought, be accepted as an excuse for my showing it.

There is, as you will notice, a hyphæma or effusion of blood into the anterior chamber. There has also been an iritis of some duration, which has caused extensive posterior synechiæ (the pupil is dilated with atropine to its fullest extent), and some obscuration of the pupil by the inflammatory exudate which has taken place.

The iris has become mottled and discoloured, so that from an eye which was originally a blue colour, it has changed into one of a greenish appearance, and has lent the eye a peculiar greenish circum-corneal haze.

Ophthalmoscopically nothing could be made of the fundus owing to the dense vitreous opacity which prevailed.

Cases IV., V., VI. are examples of a comparatively rare disease—tuberculosis of the conjunctiva.

In the first case, which occurred in an infant, the lids of the affected eye, especially the upper lid, were swollen and of a dull reddish appearance externally, and there was a muco-purulent discharge. (See Fig. C.)

On everting the upper lid the conjunctiva was found much thickened, and there were numerous nodules scattered over it, varying in size from a pea to a pin's head; some of a pinkish, others of a pinkish-yellow appearance. On cutting some of the larger ones gelatinous material could be scraped out, while others seemed to consist of granulation-like tissue here and there small ulcerated patches were scattered. In the lower lid a similar, though less marked, condition existed, the nodules being fewer and smaller. There was no enlargement of the preauricular or other glands.

Examination of a nodule showed it to consist of granulation-like tissue, but unfortunately no complete bacteriological examination was carried out to demonstrate the tubercular character.

Clinically, however, the condition was typical of tubercular disease of the conjunctiva. The treatment adopted was free removal with the knife and sharp spoon, and the eye improved considerably.

Some months afterwards, however, the child became suddenly ill, and died of tubercular meningitis.

Recently I have seen a second infant in the same family suffering from the same disease, with this difference—that it was in a much earlier stage. Both eyes were affected, and I show to you the representation of one of them (See Fig. D.)

Externally the lids had a reddish thickened look, but there was little or no discharge. On everting the upper lids they were found to be irregularly thickened and to show a few small greyish elevations, on puncturing which purulent material escaped, with one or two reddish ones, which on puncture yielded a more gelatinous matter.

In the lower lid of the eye there was a row of small pinkish-grey granules.

In Case VI., in which only one eye was affected, the appearances were similar to those of Case IV., although not so marked, the nodules being fewer and smaller, and the thickening of the conjunctiva less. There were enlarged strumous glands of the neck. (See Fig. E.)

The subsequent history of the case I cannot give, as the child left the colony.

Tubercular disease of the conjunctiva is of comparatively rare occurrence; according to

Eyre it is met with in the proportion of about 1 in 3,000 eye cases, but in Australia, where tubercle is altogether less frequent than in Great Britain, the proportion must be, I think, still less.

It is usually unilateral, although both eyes may be affected; it attacks more frequently the palpebral conjunctiva, the bulbar conjunctiva may, however, be diseased, and the cornea may become involved, a superficial keratitis developing. There is, as a rule, an absence of pain, although a good deal of discomfort may supervene from the swelling and the discharge.

The type of the disease may vary somewhat; thus it may assume—

- (1.) A trachomatous character as illustrated in those two cases.
- (2.) A lupoid character with nodules of jelly-like lupus tissue, some of which may have broken down and ulcerated.
- (3.) An ulcerative character with small miliary ulcers.

The adjacent lymphatic glands, especially the preauricular, may become involved. Although the disease may be associated with general tuberculosis, it is very frequently strictly localised, when it is in all probability caused by the direct infection of an abrasion of the conjunctiva by the tubercle bacillus.

The treatment, which consists in free eradication by the knife and curette, together with the use of constitutional remedies, may meet in some of the earlier stages with a measure of success.

Cases VII. and VIII. are illustrations of congestion of the optic disc, associated with hypermetropia, to which may be applied the designation of optic pseudo-neuritis.

In the first of these the disc was markedly hyperæmic, and the nasal margin blurred. In the second case there was swelling of the papilla.

Both cases were associated with H., the latter case with H.As., and notwithstanding the use of the correcting lenses, the discs remained for months in *statu quo*. In the latter case the swelling of the disc disappeared some eighteen months afterwards, but it still remained much congested.

Case IX. is one of retinitis developing as a sequel to the albuminuria of pregnancy. In the one eye the congested condition of the disc, with its margin somewhat blurred, and the stellate figure at the macula, were noticeable, as

represented in the diagram. The vision was reduced to $\frac{6}{60}$.

The other eye showed only a slight whitish spotted appearance at the macula, and the disc was not so congested. Vision = $\frac{1}{15}$. Under treatment vision improved in both eyes. In comparison with ordinary albuminuric retinitis, the prognosis of which is most unfavourable, the duration of life being on an average about two or three years (six years being the longest amongst the poorer, and eleven years in the richer classes), that form which is due to pregnancy is more hopeful, recovery even taking place on removal of the cause; but, on the other hand, repeated pregnancy may light up the disease in a more aggravated degree.

Cases X. and XI. are illustrations of some of the fundus changes found in high myopia. The myopia was 29 D. in one case, 22 D. in the other, and in both there were extensive degenerative changes in the posterior part of the eye.

In one eye there is a very large staphyloma posticum with extensive choroido-retinal disease, which has involved the macula; in the other eye the changes, though similar, are not so advanced.

Among the cases of myopia I have met with in Tasmania the former is so far the highest. The history of many of these cases of high myopia in this colony is a most unfortunate one, their eyes having been neglected or handed over to the tender mercies of some travelling optician, whose treatment has consisted of giving them a pair of unsuitable spectacles and then leaving them, with the result that their myopia has too often rapidly increased, and become associated with extensive changes in the posterior part of the eye, reducing them to a state of comparative blindness, whereas proper treatment might have preserved for them a fair degree of sight.

When the myopia is of high degree, or is progressing, what the patient wants is not glasses, but proper medical treatment, cessation of near work, and complete rest for the eyes. If there is one case which should not be sent to the optician for spectacles, it is a case of myopia; it should be put under the charge of an ophthalmic surgeon, and if necessary kept under his observation. Were such a course pursued it would prevent many a myope's sight becoming endangered.

WANTED.—A duly qualified Medical Practitioner for Robe, S.A. Practice small, suitable for invalid or medical man wishing little work in fine healthy climate on coast. Apply Chas. Gell, Sec. Medical Committee.

OBSERVATIONS ON ETHER ANÆSTHESIA PRECEDED BY ADMINISTRATION OF MORPHIA AND ATROPINE HYPODERMICALLY.

By W. C. McCLELLAND, AND L. H. L. HARRIS,
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SYDNEY HOSPITAL. SYDNEY HOSPITAL.

We do not claim to have originated this idea of administering the two drugs in question before Ether anaesthesia, but having seen it mentioned on several occasions both favourably and unfavourably, we decided to try it in 100 cases and observe the results.

It is not proposed in this paper to enter into a discussion of the relative merits of the different anaesthetics, but the general rule observed in this Hospital is to employ Ether in every case unless contra-indicated, and the results up to the present have been so gratifying that we see no reason to alter the custom.

The 100 cases observed were taken as they came, and only those cases rejected which proved to have albuminuria. The youngest was 12 years of age, the oldest 74, and in both instances male patients. Altogether 45 males and 55 females were treated, and the results were as follows:—

CASE.	SEX.	AGE.	Indicator kept on.	Vomiting.	REMARKS.
Ligature of Hemorrhoids ..	M	28	1	No	
Opening Knee Joint ..	M	21	1	No	
Internal Urethrotomy ..	M	3	1	No	Persepired freely.
Extraction of Teeth ..	F	31	1	No	
Vaginal Celiotomy ..	F	21	1	No	
Oophorectomy ..	F	32	3	No	
Appendicitis ..	M	29	3	No	
Oophorectomy ..	F	25	3	No	
Necrosis of Foot ..	M	32	4	No	Pt. struggled.
Inguinal Hernia (rad. cure) ..	M	32	4	No	
Ligature of Hemorrhoids ..	M	51	4	No	Persepired freely.
Excision of Tonsils ..	F	14	12	No	
" ..	M	19	2	Yes	Slightly 1½ hrs. after.
" ..	M	21	3	Yes	
Inguinal Hernia (rad. cure) ..	M	20	3	Yes	3½ clear fluid only.
Necrosis of Tibia ..	M	12	4	Yes	Slightly 8 hrs. after.
Opening Abscess of Neck ..	F	31	2	No	
Vaginal Hysterectomy ..	F	63	5	No	
Plastic on Vagina ..	F	36	4	No	
" ..	F	39	4	No	
" ..	F	24	3	No	
Excision of Varicose Veins ..	F	27	5	Yes	5 hrs. after, after trial.
Removing Glands of Axilla ..	F	24	3	No	Slight salivation.
Abdominal Section ..	F	32	3	Yes	Vomiting for 3 days previous to operation.
Opening Abscess of Leg ..	M	19	3	No	
Inguinal Hernia (rad. cure) ..	M	35	4	No	Persepired freely.
Nephrothoraphy ..	M	25	3	No	
Vaginal Celiotomy ..	F	43	4	No	
Oophorectomy ..	F	39	3	Yes	5 times.
Abdominal Section ..	F	34	12	No	Persepired profusely

CASE.	SEX.	AGE.	Anaesthesia produced in (minutes).	Indicator kept on.	Vomiting.	REMARKS.
Appendicitis ..	M	39	5	Yes	No	
Abdominal Section ..	F	34	2	No	No	
Ligature of Hemorrhoids ..	M	32	4	No	No	
Amputation of Toe ..	M	45	4	No	No	
Excision of Elbow ..	M	33	5	Yes	Yes	Large quantity.
Inguinal Hernia (rad. cure) ..	M	26	5	Yes	Yes	
Colotomy ..	F	33	4	Yes	Yes	After drink.
Ligature of Hemorrhoids ..	F	30	3	No	No	
Excising Epithelioma ..	F	68	4	No	No	
Curettage ..	F	31	4	No	No	
Abdominal Hysterectomy ..	F	31	5	Yes	Yes	5 hrs. after, after drink.
Curettage ..	F	26	4	Yes	Yes	
Ligature of Hemorrhoids ..	F	45	5	No	No	
Removal of Tumour of Thigh ..	F	42	5	Yes	Yes	3½ hrs. after.
Varicocele (rad. cure) ..	M	20	3	No	No	
Opening Periarethral Abscess ..	M	30	4	No	No	
Abdominal Section ..	F	34	4	No	No	Persepired freely.
Plastic on Vagina ..	F	18	4	No	No	
Ligature of Hemorrhoids ..	F	25	4	No	No	
Electrolysis of Nevus ..	M	13	3	Yes	Yes	Slight regurgitation.
Appendicitis ..	M	13	3	No	No	
Internal Urethrotomy ..	M	35	5	No	No	Pt. struggled.
Prolapse Recti ..	F	50	5	No	No	
Needle in Foot ..	F	34	3	No	No	
Opening Abscess of Cheek ..	M	17	3	No	No	
Opening Bubo ..	M	37	3	No	No	Rather noise afterwards.
Curettage ..	F	38	5	No	No	
" ..	F	26	4	Yes	Yes	Very little.
" ..	F	29	3	No	No	
Abdominal Section ..	F	36	3	No	No	
Excision of Varicose Veins ..	M	17	4	Yes	Yes	Shortly after operation.
Curettage ..	F	36	3	No	No	
Strangulated Femoral Hernia (rad. cure) ..	F	38	3	Yes	Yes	Vomiting previous to operation.
Necrosis of Femur ..	M	12	3	Yes	Yes	Slightly, 10 h. after
Necrosis of Tibia ..	M	23	4	No	No	
Amputation of Toes ..	M	27	3	Yes	Yes	Patient's morphine mania for 5 mths.
Abdominal Section ..	F	22	3	Yes	Yes	4 hrs. after. Clear fluid.
Ventriflexion ..	F	32	3	Yes	Yes	4½ hrs. after. Clear fluid.
Curettage ..	F	26	3	Yes	Yes	
Electrolysis of Nevus ..	M	13	3	Yes	Yes	
Amputation of Toes ..	M	33	3	No	No	
Inguinal Hernia (rad. cure) ..	M	27	3	No	No	Persepired freely.
Opening Hydatid of Liver ..	F	19	3	No	No	
Abdominal Section ..	F	33	3	Yes	Yes	
Ventral Hernia (rad. cure) ..	M	43	3	No	No	
Appendicitis ..	M	26	3	No	No	
Amputation of Toe ..	F	33	3	No	No	
Scraping Granulations ..	M	33	3	No	No	
Removing Glands of Neck ..	F	27	3	No	No	
Femoral Hernia (rad. cure) ..	F	29	3	No	No	
Opening Abscess of Groin ..	M	34	4	No	No	Slight salivation.
Abdominal Hysterectomy ..	F	38	3	No	No	
Abdominal Section ..	F	32	3	No	No	
Internal Urethrotomy ..	M	74	3	No	No	
Ovariectomy ..	F	41	3	No	No	
Amputation of Toe ..	M	60	3	No	No	
Excision of Varicose Veins ..	M	43	3	No	No	
Abdominal Section ..	M	24	3	Yes	Yes	3½ clear fluid only.
Alexander's operation ..	F	37	3	Yes	Yes	4 hrs. after.
" ..	F	33	3	No	No	Very noisy afterwards.
Kolpoperineorrhaphy ..	F	28	4	No	No	
Reducing Dislocated Shoulder ..	F	61	5	No	No	
Excision of Varicose Veins ..	M	29	3	No	No	
Opening Knee Joint ..	F	39	3	No	No	
Appendicitis ..	M	19	4	No	No	
Abdominal Section ..	F	32	3	Yes	Yes	3½ hrs. after, clear fluid.
Removing Glands of Neck ..	F	34	3	No	No	
Abdominal Section ..	F	27	4	No	No	3½ hrs. after.

The anæsthetic in these cases was administered by five different residents, some of whom had only anæsthetised on a few occasions previously, so that it will be seen no special practice in anæsthesia is necessary for this method.

The quantities of the drugs employed were as follows:—Morphia sulphate gr. $\frac{1}{2}$, and atropia sulphate gr. $\frac{1}{30}$, administered hypodermically, varying a little according to the age of the patient. The time allowed between the administration of the drugs and the commencement of the anæsthetisation varied from 5 to 60 minutes, but it was found that the best results were obtained when the injection had been given from 20 to 30 minutes before the operation. In only two cases did any struggling occur, whilst in the remaining 98 they all took the anæsthetic quietly and in a very short time, as seen on reference to the table.

The quantity of Ether inhaled to produce anæsthesia was very much less than usual, and the time occupied was also diminished. After having got the patient well under, anæsthesia was generally maintained by using only a small quantity of Ether for the remainder of the operation.

In only five cases did the patients perspire at all freely, and only two per cent. of cases salivated and these to a very slight extent. After being under for about an hour the pupils would tend to become rather sluggish at times, but the breathing and the colour would remain perfectly normal throughout and offer no cause for anxiety.

On no occasion did the patient strain or vomit during the operation, though on several occasions the conjunctival reflexes were very active, and a few whiffs soon sufficed to put the patient well under the anæsthetic again.

In several of the cases after the operation had terminated, a short time elapsed before the reflexes were quite recovered, and in most of these cases it resembled deep sleep, as by tickling over the ribs the reflexes soon returned. On several occasions the breathing became shallow, but not to an alarming extent.

The most striking fact in the majority of cases was the quiet way in which the patients emerged from the influence of the anæsthetic, sleeping for several hours in many cases, and not complaining of any pain on coming to. In several cases, however, the patients were very noisy, though not more than is usually the case without a previous injection.

As regards vomiting, it was noticed that this was markedly diminished; only 28 cases out of

the 100 vomited, and many of these some considerable time after, and others only small quantities. The nature of the vomit, too, resembled rather a regurgitation of clear fluid mixed at times with a little froth, and the vomiting was generally not distressing, though in three cases it appeared as though an idiosyncrasy existed, as the vomiting was persistent for some hours. In one case of a morphinomaniac he vomited several times after. A female with a strangulated femoral hernia, who was vomiting incessantly previous to operation, also vomited several times afterwards, while in many of the cases the vomiting followed after the patient had taken some sips of hot water.

The dryness occasioned by the atropine was not complained of much, and it was found that the drinking of oatmeal water was advantageous in this respect.

In a paper read by John D. Rushmore, M.D. of Brooklyn, before the New York Surgical Society, May 11th, 1898, and published in the *Annals of Surgery*, vol. xxviii., No. 4, page 472, the writer speaks in most glowing terms of this method of anæsthetisation, and ends his paper thus:—"If I should single out the two most reliable means that I can depend on to lessen the dangers and disagreeable symptoms of Ether, I should mention first, as the more important, the proper administration of the anæsthetic, and secondly, the use of morphia and atropia before the operation."

Dr. Silk, in an article on Anæsthetics published in a *Manual of Surgical Treatment* by Watson Cheyne, M.B. Edin., and F. F. Burgham, M.D., M.S., F.R.C.S. Eng., disposes of the subject in a very brief manner by stating that the idea is rather of theoretical than of practical value.

Altogether opinion seems to vary considerably as to the utility or otherwise of this method; nevertheless, to sum up the results of our observations upon 100 cases we find:—

1. The patient's nervous system is quietened, being rendered more susceptible to the influence of Ether.
2. The patient becomes anæsthetised in a very short time, on an average in less than four minutes; only a small quantity of Ether is required to produce and to maintain the anæsthesia.
3. Salivation is the exception and practically never occurs.
4. The patient breathes tranquilly and regularly.

5. The atropine exerts its action on the heart as a stimulant, and thus the patient is less liable to shock following the operation.
6. Should the patient inadvertently come out during the operation, or just before its termination, there is no straining or tendency to vomit.
7. The patient generally emerges from the anæsthesia in a gradual and tranquil manner, and seldom complains of pain, sleeping quietly for several hours.
8. The tendency to nausea and vomiting after the operation is greatly diminished, and when present is very slight and does not cause much distress.
9. No deleterious after effects appear to follow this method.

In conclusion, we wish to thank the Honorary Surgeons of the Hospital for their kind permission in allowing the injection to be used in their cases.

INJURY TO BLADDER, SIMULATING RUPTURE.

BY GERTRUDE HALLEY, M.B., CH.B. MELB.,
MELBOURNE.

At 7 a.m. on Sunday, April 23rd, I was called to visit Mrs. M., *æt.* 45. On arrival I found the patient, a thin small woman, in bed in very great pain, I obtained the following history. As the night was close she was sleeping on a mattress on the floor at the side of the bed. About 12 o'clock, her husband, a very big man (about 16 or 17 stone) got out of bed, and not knowing his wife was sleeping on the floor, stumbled over her and fell heavily, one knee on the lower part of the abdomen and the other upon her chest. She was very much shaken. The abdominal pain being severe, she was fomented with hot turpentine stupes; but as the pain got more severe, and the patient was feeling very ill I was sent for, about seven hours after the injury.

On examination.—Temperature, 99°; pulse, 96; respiration, 20. She was lying on her back. The abdominal muscles were all very much on guard. There was tenderness all over the abdomen, especially over the lower part. She shrunk from the lightest palpation. No distension of abdomen. She complained that she was unable to pass her water, and that the bladder felt full. On percussion no dulness. She had passed her water about ten hours

before. I drew off with a small soft rubber catheter about 3vi. of urine, the last 3ii. or so being intimately mixed with blood, and the last being almost pure blood. She seemed relieved somewhat.

I examined carefully over the renal regions, but there was no special tenderness. She had been under me some two months before, and then the urine was normal in amount, no albumen present. No history of any bladder trouble. On account of pain I gave her 1/4 gr. of morph. and hot fomenta. Three hours later she seemed a little easier, ordered her a sedative mixture if pain came on again.

At 5 p.m. I was sent for in a hurry as they thought she was dying. I found her collapsed, extremities cold, whole body bathed in perspiration; pulse, small, compressible, 160; temperature, 102°. She had been vomiting continuously for three hours. She was lying with her legs drawn up. Abdomen much distended and so tender that she could not bear the weight of compresses. The bowels had not been open, and she had not passed her water. I again passed a soft catheter and drew off about 3ii. of almost pure blood, just smelling of urine. Fearing rupture of the bladder, I strongly urged her immediate removal to hospital, but they all objected. I injected 3/4 gr. of strychn., and as the pain was so intense, although taking into account the urinary symptoms, I gave her 1/4 gr. of morph. Had her packed with hot bottles; very small doses of iced brandy. About two hours later she seemed better; skin warmer, pulse 130, still vomiting. I drew off about 3ii. of urine and about 3i. of blood. I then slowly injected into bladder 3viii. of warm boracic solution. She complained very much of pain when the bladder was full of the solution. The full amount was returned, the last 3ss. or so being just tinged with blood. Left 1/4 gr. of morph. to be given at midnight, if pain still severe.

9 a.m.—Had slept about an hour, but still vomiting everything. Abdomen much distended and very tender. Temperature 102°, pulse 120. Drew off 3viii. of urine, smoky. Bowels not open. Ordered mag. sulph. 3i. and liq. strychn. Miv. every hour, and ordered enema.

5 p.m.—Bowels open after two enemas of oil and water. Had passed urine twice herself, in small amount. Pulse again 160, small, irregular. Vomiting still, in spite of everything. Was very weak. Ordered iced champagne, in teaspoonful doses; also gave strychn. and 1/4 gr. of morph. hypo., and ordered nutrient enemas of egg and brandy.

Tuesday, 10 a.m.—Slept about two hours. Vomiting slightly better. Retained some Brand's essence and peptonized milk, in $\frac{1}{2}$ doses. Passing her water about four times in the 24 hours, but unfortunately it was not measured, being passed after the enema and when some disinfectant in the pan. Abdomen still distended and tender, but towards evening the patient allowed her legs to be drawn down.

For about a week the temperature kept up between 100° and 102° , and pulse between 100 and 120, the vomiting and distension gradually getting less, and in a fortnight she was convalescent, having no trouble with bladder, urine being normal in amount and no blood.

This case seemed interesting for several reasons. (1) As far as I can find out it is unusual for lining membrane of the almost empty bladder to be so injured by such external violence so as to cause hæmorrhage into it. I think had the bladder been full it would almost surely have been ruptured. (2) The extreme shock and collapse were so long deferred; had there been rupture of the bladder or kidney (the persistent vomiting suggesting the latter) one would have expected the patient to be suffering from shock when I first saw her some seven hours after the injury, whereas it only began eight hours later still. (3) The almost complete suppression of urine—although no injury to the kidneys could be diagnosed from external examination. It is rare to have such severe injury to the peritoneum, without any external bruising or injury, through the abdominal walls. The injury to the peritoneum must have been severe to have caused such acute general peritonitis. The uterus and appendages were normal and healthy. Morphia seemed to be contra-indicated when there was almost such complete suppression of urine, but the pain was so intense that it was absolutely necessary. Although she had gr. i. the first day it did not produce sleep, and the pupils were never contracted. The vomiting was very persistent, resisting every remedy tried.

NOTES ON A CASE OF PULSATING EXOPHTHALMOS.

BY ARTHUR MILLS, M.B., CH.M. SYD., HON. ASSISTANT PHYSICIAN, PRINCE ALFRED HOSPITAL.

B.C., a married woman, æt. 33, came to outpatient department at Prince Alfred Hospital towards end of last month, complaining of pain in right temple and tremendous noises in her head. She stated that she had been ailing for the past eleven weeks.

While engaged in her domestic duties, she was suddenly seized with an acute pain in her right temple. The pain was accompanied by various noises in her head. At one time the noises would be like "wheels going round;" at another time like bells ringing. The pain continued for some four weeks, and interfered greatly with the patient's rest at night. About four weeks after the first onset of her illness, the pain became much less constant and less acute; and for the last three weeks patient has had very little pain. The noises in the head became continuous, and are now of a humming, churning character.

Four weeks ago the patient first noticed her right eye beginning to bulge forward. The bulging increased, and she noticed it became bloodshot. The patient's hearing has become more impaired since present illness began. She has had slight attacks of giddiness during the last three or four weeks. She had one miscarriage shortly after marriage, and one premature child some nine months ago. There is nothing important in her past history. Her mother died of phthisis. She does not know the cause of father's death. Her brothers and sisters are quite healthy.

On examination patient is seen to be a pale, poorly nourished woman. Nasal bridge depressed. The right eye shows marked proptosis. There is some oedema of right lower eyelid, and marked congestion of conjunctival veins. There is paralysis of right external rectus muscle, and movements of the eye in all directions are restricted. The pupils are dilated, and react faintly to light and accommodation. Light pressure upon eyeball shows it to pulsate. Pressure over eyeball causes the proptosis to diminish and eventually to disappear. The proptosis reappears suddenly when pressure is removed. Pressure over the carotid stops the pulsation in eye, arrests the noises in the head, and diminishes the proptosis. On releasing the pressure the proptosis again becomes suddenly pronounced.

On auscultation over the eye, there is a well-marked bruit to be heard, almost continuous. This bruit is audible nearly all over the head. Pressure over the carotid arrests the bruit; on listening over the carotids of both sides, there is found a bruit on the right side which is not present on the left side. This bruit is heard loudest near the angle of the jaw.

R. V.— $\frac{1}{2}$ C—2nd C ax. 60° = $\frac{1}{2}$ ii.
L. V.— $\frac{1}{2}$ C—2nd C ax. 60° = $\frac{1}{2}$ ii.

On examining fundus, right disc is seen to be greyish-white, veins are engorged and tortuous,

arteries small. Left disc, pale; there is a large myopic crescent with choroidal atrophy.

For many of these observations I am indebted to Drs. Pockley and Hughes, the ophthalmic surgeons. Dr. Hankins reported as to the hearing; tested by his audiometer left ear was $\frac{1}{10}$, right ear was $\frac{1}{20}$. There was marked tinnitus of right ear. The membranæ tympani of both sides were cicatricial. Rinne's test was positive in both ears. There was nothing special to be found in the other organs.

From a study of the symptoms and signs enumerated in this very interesting case, there can be little doubt as to the diagnosis. The pulsation of the eyeball, the bruit over it and over the head, the disappearance of these signs and of the noises and the proptosis, upon pressure sufficient to obliterate the carotid, all point to an aneurism of the internal carotid in its intracranial course. Of course, the proptosis might have been caused by a new growth, either in the shape of a gumma or of a malignant growth; but the sudden onset of the tinnitus, the pulsation of the eyeball, and, in fact, the dependence of all the signs and symptoms upon the maintenance of the blood current through the carotid, put these hypotheses out of court. Further, the aneurism must involve that part of the artery which traverses the cavernous sinus, for there is paralysis of the external rectus muscle, due to interference with the sixth nerve. There is the marked engorgement and tortuosity of the retinal veins, which must be due to obstruction to venous return, and this obstruction could and would be caused by an obliteration of, or a pressure upon the cavernous sinus, or an interference with the course of the blood through it.

Now I do not think that a mere aneurism of the artery would cause the marked tinnitus from which this patient suffers unless it were of large size. And if it were of large size there would probably be pressure upon the other nerves which lie in the wall of the sinus, viz., the third and fourth and ophthalmic division of the fifth. There are no symptoms of such pressure. We must, therefore, look for some other explanation. This I think is to be found by assuming that there is a communication between the interior carotid and the cavernous sinus. There must have been an endarteritis with gradual weakening of the arterial wall, perhaps slight bulging and then a final bursting of the artery into the sinus. This result explains the sudden onset of the tinnitus, its continuance, and affords a satisfactory explanation of the signs and symptoms detailed. The

cedema of the lower lid, the congestion of the conjunctival, and retinal veins, are all to be explained upon interference with venous return, such as would be produced by a varicose aneurism of the interior carotid and the cavernous sinus.

This view accords well with the conclusions arrived at by Sattler, who investigated some 50 cases of arterio-venous aneurism, where the internal carotid and the cavernous sinus were involved. They occurred most frequently in women, and the onset of the tinnitus was sudden, as in our case, sometimes like the report of a pistol, and in all cases examined there was a communication between the artery and the sinus.

As to treatment, the indications are plain that the internal carotid should be tied. This will be performed next week and I hope to show you later on the result. We should, I think, expect a favourable issue.

THE BACTERIAL TREATMENT OF SEWAGE.

By FRANK OGSTON, M.D., CH.M., DUNEDIN, N.Z.

At the present time, when we are deafened by the blatant outcries of fanatics of all classes of society, not even excluding men of our own profession, in antagonism to what may be regarded as the greatest advance our Science of Medicine has made in recent years, or perhaps has ever made—the practice of protective inoculation by bacterial products against diseases—it is interesting, and instructive for us to know that the subject of bacteriology, and its outcomes, has for some years, engaged the attention of a class of men, who occupy the foreground in the ranks of scientific workers of the present day; I allude to members of the Engineering Profession.

Two methods of bacterial purification of sewage are much in discussion at present, each having its strenuous advocates. These are the Septic Tank system and the Bacterial Filter. I propose to present you with a résumé of each, and to follow it up with the opinions of a few leading engineers, chemists, and medical men engaged in sanitary practice. In support of the opinion, I may be allowed to express, perhaps, that here we have a most promising solution of the problem of how our sewage is to be harmlessly disposed of, especially in our inland towns and villages.

The Septic Tank System has been in operation in Exeter since 1895, and has been adopted in

other places. Its fundamental principle is, that by treating sewage in the dark, and with no, or very limited, supply of air, the anaërobic bacteria will break up the organic materials and compounds, (including the bacteria of various diseases) converting them, to speak roughly, into harmless ammonia, carbonic acid, and water. Then a second part of the process follows:—The now liquefied sewage is aerated, and run into filter-beds, in which it remains for a time, to be acted on by aerobic bacteria, the ammonia being changed into nitrites, and finally nitrates; that is to say, oxidation is fully accomplished, the effluent being now harmless, and fit to be run into any stream or water-course.

Among the advantages claimed for this method are:—

- (1) Practically the disposal of the sludge, or muddy remains of the solid sewage, by solution. The question of what to do with this putrescible mud, having been one which has much exercised engineers.
- (2) The effluent is free from antiseptic ingredients, and in the best condition for irrigation and filtration.
- (3) A considerable reduction in the cost of the disposal of sewage, as compared with the methods already in use.

A short description of the mechanism and actual working of the process may be of interest. At Exeter, part of the sewage, 7,000 to 10,000 gallons per diem, the average sewage of 300 to 400 people, passes into a tank 24 feet by 9½ feet, and 4 feet deep; this tank being buried underground, and capable of holding 6,500 gallons. Air and light are excluded, and to farther exclude air, and to avoid disturbance of the upper parts of the contents of the tank, the inlet pipe, through which the sewage flows continuously, is extended below the surface of the sewage, the overflow being carried off by a slotted pipe.

On entering the still water of the tank, the solids contained in the sewage are to a great extent immediately disengaged, some sink to the bottom, others rise to the surface, according to their specific gravity, but both are immediately attacked by the micro-organisms present.

In this manner, the solids are speedily dissolved, the resultant ash dragging the organic matter in suspension down to the bottom of the tank. Here a fresh action sets in, and a gaseous bubble is formed, by which each particle is again buoyed up to the underside of a leathery crust, which is soon formed on the top of the

contents of the tank. The bubble gradually squeezes through this crust, and bursts under the dome of the tank. Having now lost their airy support, the fragments again fall to the bottom, and the process is repeated until the whole of the organic matter has been dissolved, and nothing remains beyond mineral ash, on which bacteria cannot feed.

The effluent, which is practically clear, and to a great extent purified, may be discharged directly into a stream or lake, there to be finally oxidised and purified, if one with sufficient water is available. This failing, it must be further purified. This will be greatly accelerated, if the effluent is allowed to take up oxygen as it issues from the liquifying chamber. For this purpose, it should be allowed to flow in thin sheets over flat surfaces, or over the edges of a suitable channel. The ultimate purification may be carried on by land irrigation, or with artificial filters.

Land irrigation is conducted in the usual manner, the sewage field being divided into two or three portions, so arranged that each may have a period of work, and another of rest for oxygenation; the sewage effluent being supplied at given intervals from an automatic flushing tank. The irrigation may be on the surface or under it.

When filters are employed, pits are dug. If the soil be retentive clay, no farther lining is required, if porous, they must be lined with an impervious material. They are two or three in number, and are worked alternately, filling, standing full, and standing empty; two hours being allowed for each of these conditions, to allow of the necessary oxidation. The filters are generally about three feet deep, and of sufficient capacity to retain a two hours flow; they are filled with coke in small pieces (breeze), or gravel, or even with the clay which has been dug out of the pit. If it has been thoroughly burnt, it will do quite well. From these the effluent issues practically perfectly purified; fit even for drinking and household purposes.

The Bacterial Filter, the second system I shall notice, it is urged by some authorities, is complete and sufficient in itself to purify sewage. But it appears to have the old objection that it does not entirely do away with the sludge difficulty; it is, however, in use in several towns in England, Manchester, among others, and appears to be working satisfactorily in these. Though practically worked out by Mr. W. J. Dibdin, F.I.C., chemist to the London City Council, it was suggested by the

well known engineer, Mr. W. D. Scott-Moncrieff, a good many years ago.

In the Bacterial filter, or bacteria bed, as it is also called, the dark closed tank is dispensed with, and in its stead an open bed is used, filled with coarsely broken ballast, like that used for road making apparently. In this the aerobic bacteria are used to do the work. The sewage, which must be strained to get rid of its coarser particles, is run over the bed, and allowed to stand there for one to three hours. The flocculent particles adhere to the stones, and are acted on by the bacteria, and liquified. The semi-liquid stuff is then run off into a second series of beds filled with coke, in which the final process of purification is accomplished. Mr. Dibdin has added to these filters a culture of microbes—the *Bacterium Albicans*, I believe—to ensure of the work being thoroughly carried out.

These two processes may be thus seen to be nearly identical; the difference being, that in the former, the septic tank, both the anaerobic and the aerobic bacteria are used, while in the latter, the bacterial filter, the aerobic bacteria alone are employed. And that, while in the former, only the very coarsest of the sewage requires to be primarily removed; in the latter, a good deal of the rougher part of the sewage itself has to be screened away before the sewage can be run on to the filter beds, thus, apparently, the sludge difficulty still remains to some extent in the latter method.

I may quote the annual report of the North-Eastern Sanitary Inspectors' Association respecting these two methods:—"Mr. Dibdin himself reports of the Septic Tank System, equally with the Sutton System (his own), this process is well adapted from the chemical and biological point of view, for the efficient treatment of crude sewage without the aid of chemicals, sludge-presses, etc. These two systems hold the bacteria field, and there is not now any other field or process of sewage disposal having other than an antiquarian interest. Attention may therefore be confined to their differentiation in the first process; the liquefaction of sewage solids, the elimination of the sludge difficulty, the partial breaking up or resolution of the organic constituents of sewage, preparing them for nitrification. This in the septic tank, is simplicity itself, and is secured by anaerobic organisms, which require only rest and darkness to do their work for evermore, without rest, attention, or expense of any kind. They deliver it too, at the same level at which it is received, an enormous advantage in itself for flat countries, or wherever fall is scant."

Mr. Dibdin reports that by them (the anaerobic bacteria) "the amount of oxidisable organic matter in solution was reduced by 30·8 per cent., the free ammonia by 26·9 per cent., the albuminoid ammonia by 17·8 per cent., and the suspended solids by 55 per cent., the condition of the organic matter being also changed, rendering it more easily broken up. And as the effluent is also very presentable—a clear and light straw-coloured liquid—it may suffice, without further purification, for many country mansions.

"In the Bacteria Bed system Mr. Dibdin adopts liquefying aerobic bacteria, by which he thinks the work may be done even more thoroughly, and which act only in an open and regularly aerated series of tanks, exactly as do the nitrifying organisms of the second process. This plan requires, however, (1) Preliminary straining of the sewage; (2) Distributing channels for the sewage; (3) Daily cleaning and disposal of contents (1) and (2); (4) Filtering material or bacteria bedding; (5) Daily raking and occasional trenching of beds; (6) Partitions for the constant alternations of beds; (7) Fall, as it delivers several feet below level of receipt. These requirements greatly outweigh the cost of covering in the septic tank, which is the only item fairly urged against it, etc."

It may be well now to bring proofs that the bacterial system, in either of its forms, is superior to any of the previously tried systems of sewage purification. This I shall do by quoting the dicta of recognised authorities among engineers, chemists, and medical officers of health.

Gilbert Thomson, C.E., in a paper read at the Congress of the Sanitary Association of Scotland, in 1897, on "Recent Developments in Sewage Purification" said:—"Referring to the three best methods now in use—treatment on land; by precipitation; by bacteriological methods." Of the first two he summarises thus:—

(a) Treatment on land.—"The first stage was the endeavour to enrich the land by means of sewage, either by running it over the surface, or by allowing it to deposit its solid matters in tanks, in the belief that the solid deposit would be most valuable manure, while the upper liquid would be practically pure. But while the direct application of sewage to land has often given excellent results, the simple process of settling has been a failure, because much of the impurity was dissolved and, therefore, did not settle to the bottom."

(b) Precipitation.—“By various processes which aim at separating the solids from the fluids by the addition to the sewage of chemicals, in the hope that the solid manure thus formed would prove of value, (a hope which has never been fulfilled), and although time and again the same result has been reached, a sludge of little manurial value, and an effluent far from pure, these early experiments have left us with a number of precipitation processes which, with the addition of filtration, can produce a reasonably good effluent, and left us, too, the knowledge that treatment on land can produce an effluent which satisfies our requirements.”

In concluding his remarks he stated: “It now looks as if both the engineer and the chemist will have to occupy a position altogether subsidiary to that occupied by the omnipresent microbe, and that their operations must be directed by those to whom the habits and life history of the microbe are best known. While, however, it appears as if the future progress in sewage purification will be largely dependent on bacteriological research, the new methods have not yet so completely proved their superiority as to drive the others out of the field.”

Mr. Wynne Roberts, C.E., borough surveyor to Oswestry, in the same year, experimented with the Septic Tank System, and reports that “The success which has attended the experiment is remarkable.”

Mr. Baldwin Latham, C.E., at a meeting of the Society of Engineers, in London, in December, 1898, said:—“It appeared to be a settled matter that sewage could be dealt with successfully in the way described (bacteriologically), and during the last two years experience showed that those who were working in this direction were public benefactors, for, not only did they show an effective method, but one which obviated large expenditure for chemicals.”

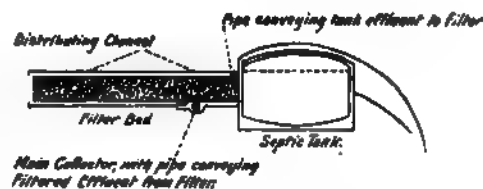
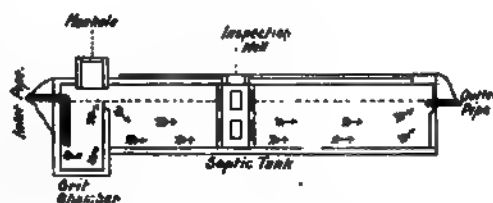
So much for engineers; let us hear the opinions of chemists:—

Mr. W. J. Dibdin, F.I.C., chemist to the London County Council in his book “On the Purification of Sewage and Water,” speaking about the practical results of the Bacterial Filter, in work at Sutton, Surrey, reports:—“The tank, charged with burnt ballast, was prepared for the reception of the sewage by inoculating it with bacteria, my former experiments having shown that such preliminary treatment contributed materially to better work. The tank was filled with raw sewage—untreated with chemicals—but which had been

strained through a screen, to intercept the grosser particles. The result was of the most satisfactory nature. . . . The total quantity of sewage treated was equal to an average of 26,165 gallons per day, or 773,000 gallons per acre per day.”

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Filter Beds showing dissolved carriers.



Mr. G. Thudichum, F.C.S., in December last year, at a meeting of the Society of Engineers, in London, said:—“It is now evident that the general principle of bacteriological treatment, in one form or other, is acknowledged by the majority of those practically concerned in the disposal of waste matters, the doctrine being generally accepted. For dealing with sewage from a small community, such as a public school, or an asylum, the Septic System should be employed.”

This is the opinion of medical authorities.

Dr. Sims Woodhead has stated that:—“The bacterial process of dealing with sewage is the best I can recommend at present.”

Dr. Taylor, M.O.H., at the meeting of the Sanitary Institute, held in Birmingham last year (1898), who has devoted himself for six months to the study of the bacterial treatment of sewage alongside other methods, presented a lengthy report in which he stated that:—"The result of his experiments confirms the testimony of others, as to the value of this latest discovery in sanitary science," and expresses the hope that at last a really efficient means of purifying sewage has been found. He further remarks:—"I have no hesitation in saying that the bacterial tanks are an efficient mode of treating sewage; their efficiency is much greater than any precipitation process, and the initial cost and the farther cost for maintenance and working, are much less than in the case of land irrigation. No nuisance is produced, and the effluent is of so good a character as to satisfy any County Council."

Not to detain you farther with the multiplication of opinions, I shall sum up with a report by the experts appointed by the Local Government Board on the working of the Bacterial method of purification, as applied to Manchester sewage.

This report is signed by Baldwin Latham, Percy Frankland, and W. H. Perkin, jun., names to conjure with:—

"We are of opinion that the Bacterial system, notwithstanding the particular nature of the Manchester sewage, will purify that sewage, and will yield an effluent which will comply with all the requirements of the Sanitary Committee, and which, when discharged into the Manchester canal, will greatly improve its waters."

We medical men are not competent to decide the question as to the relative merits of the Filter Bed, solus, versus Septic Tank plus Filter Bed, and must content ourselves with following the results of this interesting development of the science of Bacteriology, which perhaps we have hitherto too much regarded as the sole domain of medical men.

In conclusion, as financial results do not directly concern us, I shall omit them and wind up by citing, in a few words, results given by the Septic Tank System, according to Mr. Dibdin, a not too favourable critic, perhaps:—

"The quantity of oxygen required to oxidise the organic matter in solution in the raw sewage was, on an average, 5.40 grains per gallon; which was reduced by the bacteria tank to 1.83 grains per gallon, or a reduction of 66 per cent.

"The further treatment of this effluent by the Coke Breeze and other filter beds, reduced

this required oxygen to .72 grains per gallon, or a total reduction of the oxidisable matter by 86.5 per cent.

"In like manner the solid matters held in suspension in the sewage, were reduced by the bacteria tank by 95 per cent., and by the combined system, by 98.6 per cent."

To further show you the merits of the Bacterial Filter, as compared with ordinary filtration of sewage, say by an irrigation farm, I may quote Mr. Thudichum, in a paper read before the Society of Engineers, on 7th December, 1896:—

"When a biological filter is employed, the whole of the conditions necessary for the ultimate purification of sewage, are completely under control being independent of the seasons, and of all extraneous influences. The sewage itself supplies the organisms whereby the oxidation is effected, and all that need be done is to supply them with the surroundings necessary for their proper development and increase, and these requirements are of the simplest, consisting merely in alternate supplies of food and air, with an occasional but not too prolonged rest. If by mismanagement or by accident, the working power of the filter is impaired, recovery is easy and certain. Neither wet nor dry, warm nor cold weather will affect the result, and a filter can be built on low-lying or marshy land, upon which the establishment of a sewage farm would be practically an impossibility.

"If the conditions obtaining on an irrigation farm be now considered, it will be found that they differ essentially from those of the artificial filter. The power of control is wanting. If the land be sufficiently porous and well-drained to prevent its becoming water-logged, and to permit of the free passage of the effluent during wet seasons, it will not retain the effluent for a sufficient time during dry periods, to admit of the work of purification being completed; whilst if it be sufficiently retentive to effect this, it will be useless during heavy rains. The time of contact, instead of being just sufficiently long to cause the oxidation to take place to any required degree, whilst avoiding killing the micro-organisms through want of air, must of necessity vary, and the quality of the filtrate will vary accordingly. In seasons of severe frost, the crude effluent will simply run over the surface of the ground and escape practically unchanged; and the first action of a thaw, especially if accompanied, as is so frequently the case by rain, serves to accentuate the evil. Further, while no nuisance is ever created by the artificial method, I have never

known an irrigation farm which did not, in some parts at least, fail in this particular.

"But the final and chief objection to the irrigation method of sewage disposal lies in the fact that the sewage must be delivered on to the land quite irrespective of the requirements of the latter, and without regard to seasons and to the condition of crops. It is this which is the main cause of the nuisance which obtains at some time or other on practically all sewage-farms.

"It cannot be denied that during certain seasons of the year, at particular stages of the growth of the crop, water may be supplied by broad irrigation with the utmost advantage; and more especially if the water contains some fertilising properties; and this is precisely what is rendered possible by the adoption of the system of biological filtration. During droughts, and whenever the state of the crop requires it, the filtrate can be distributed on land, assisting growth both as water and manure, for it still contains nitrites and a proportion of organic matter; the latter, however, in such a condition that nuisance is impossible; and the possibility of the spread of disease, or of the parasitic entozoa—a possibility which, in the opinion of the late Dr. Letheby and Dr. Cobbold, is a very real one—is entirely removed. On the other hand, when the soil is already sufficiently moist, and the growing crops require neither water nor stimulation, the filtrate can be passed into the nearest stream however small."

NOTE ON FORMALIN IN THE TREATMENT OF MELANOTIC SARCOMA.

By C. E. TODD, M.D., ADELAIDE.

SOME weeks ago I showed at the South Australian Branch of the British Medical Association a case of melanotic sarcoma. The disease was so extensive, and existed in so many different parts of the body, that it was quite impossible to remove all the growths by any surgical operation. What caused the patient most pain and distress was the presence of scattered ulcerated melanotic spots on the skin, varying in size from a five-shilling piece to a small shot. They were situated on the left side of the neck and down the left side of the thorax. In order to stop the hæmorrhage and, if possible, remove these skin growths, I decided to apply formalin after the manner described in the *British Medical Journal* some months ago. In order to test the process some

of the larger tumours were surrounded by celloidin paint and cotton wool to protect the skin, and a twenty per cent. solution was applied on lint to them. This was covered with dry cotton wool, and changed three times a day. What little pain there was could easily be checked by small doses of nepenthe. In the course of a few days the tumours presented a black, dead, scab-like appearance, and I was able gradually to shave off layers of growth without either pain or hæmorrhage. The cut surfaces presented the appearance and cut very much like gutta serena. After several layers were removed the surface of the growth would begin to bleed slightly, and it was then packed again with formalin lint, and in the course of a day or two the surface was again shaved off. In this way, I removed, at least, a dozen of the most ulcerated and painful skin growths without hæmorrhage and with very little pain. After the removal of the tumours a healthy granulating surface was left, and many of these patches were healing. By the continuous use of formalin it would, I think, be quite possible to remove a sarcomatous growth however deeply it extended from the surface, provided, of course, that it did not involve vital structures. This could be done with very trifling or even no bleeding, and not with excessive pain. In my own case the patient died of a large, deeply-seated growth, in the neck. It pressed upon her carotid artery, jugular vein, and pneumogastric nerve, and caused difficulty in swallowing by pressing on the pharynx. I did not think it safe to eat down into this growth by formalin, although it would have been quite possible to do so. With regard to the strength of the formalin solution, I began with twenty per cent. This was rather slow in its action, and I, therefore, gradually increased its strength until I reached the standard—forty per cent. I do not think the stronger solution gave much more pain than the weaker. From my observation in this case, I should think that formalin will prove very useful in cases of advanced sarcoma in which no operative interference is justifiable. Its strong antiseptic properties at once remove the fætor of a large fungating surface, and its astringent qualities stop the hæmorrhage, which is such a drain in the later stages of ulcerating sarcoma.

P. D. & Co.'s ANTIDIPHTHERITIC SERUM.—During the winter of 1898, 219 cases of bacterially verified diphtheria, of which 23 were intubation cases, were treated with the above under the auspices of the Chicago Health Department, with only nine deaths, or a mortality of 4.1 per cent. In Denver and Milwaukee equally good results were obtained.

PUERPERAL SEPTICÆMIA TREATED BY ANTI-STREPTOCOCCIC SERUM.

By J. G. JOHNSON, M.R.C.S., L.R.C.P., EVANDALE, TASMANIA.

READ BEFORE THE LAUNCESTON BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE treatment of these cases by serum-therapy is still on its trial. Excellent results have followed its use in many cases; in others disappointment has had to be faced. The majority of these cases get well with intra-uterine treatment alone, if it be commenced sufficiently early; but as soon as the local affection becomes a general one, then the case becomes of the most serious importance, and will tax to the utmost all our resources. What are our resources? Very few indeed of any approved scientific value. The unpleasant fact stares us in the face, when we are in attendance on one of these ghastly cases, that after all we are very helpless; and in our helplessness we trust to Mother Nature. It is because I believe that we have in serum-therapy an important addition to our forces in attacking this disease, that I have been encouraged to record this case.

I was sent for on Wednesday night, May 17th, 1899, to see Mrs. R. A., age 29 years. The place was six miles from my residence.

I was given the following history:—She had been confined with her second child on the previous Sunday afternoon, attended by a village midwife. This woman stated that the labour was perfectly natural, and that everything had come away all right. On Monday evening she was seized with a shivering fit, the discharge began to stop, and there was a nasty smell in the room. During the night she was restless, had no sleep, was flushed and excited.

Tuesday.—She was hot and thirsty, took no food, was very sick and had diarrhœa. The milk stopped; there was very little vaginal discharge; there was a great smell in the room. Tuesday night was passed without sleep, great restlessness and excitement; was talking nonsense great part of the night; was sick several times, diarrhœa continued.

Wednesday morning.—There was no improvement. Her husband said that this morning she was "quite off her head." She was sick several times during the day, the vomit being green and slimy; there was still diarrhœa.

Wednesday night, at 9 p.m., I saw her. The stink in the room was dreadful. The patient was talking wildly; the face flushed; tongue and mouth dry. Temperature, 105°; pulse,

130. Abdomen tympanitic over the lower part; uterus reached as high as the umbilicus, and was very painful. The labia were very swollen; on separating them stinking pus streamed out. I at once thoroughly washed out both vagina and uterus. I noticed some membranous stuff came away, and on examining the vagina found it was covered with membrane. I gave instructions to give as much water as possible to drink, and the usual advice as to diet.

Thursday, 6 a.m.—No sleep last night, quite delirious. Temperature, 104°; pulse, 130. Tongue very red; the breath has the characteristic septicæmic odour; the abdomen is more distended; there is no sign of any milk in the breasts. The sickness is better, and there is no diarrhœa; passing water freely, very high coloured and stinks. She has taken a little liquid food. The uterus was again thoroughly flushed. I kept up the irrigation until I was satisfied that the fluid came away quite clear. A lot of membranous stuff washed from the vagina.

9 p.m.—Temperature, 103.4°; pulse, 124, soft but regular. The patient's condition is the same. Abdomen is more swollen; uterus same size, still very painful; the whole of the neck, chest, abdomen and thighs are covered with a thick erythematous rash. The uterus was again thoroughly irrigated. I noticed for the first time some pieces of placenta came away.

Friday morning, 9 a.m.—The patient's condition was about the same; the rash had become pustular. Temperature, 102.6°; pulse, 130, very weak. Dr. Clemons kindly gave chloroform, and I thoroughly curetted the uterus. There had been a good deal of placenta left behind and some membranes. The stink was dreadful. I removed as much of the membrane as I could from the cervix and vagina. Where this was stripped off the surface bled freely. There was a good deal of hæmorrhage, so I lightly packed the uterus with iodoform gauze.

10 p.m.—Had a severe shivering fit about 5 p.m. Very delirious; was with great difficulty restrained in bed; still great stink in the room. Temperature, 104.6°; pulse, 140, very feeble. A large fresh outcrop of pustules over the whole body; abdomen very distended; tympanitic all over; retention of urine. Removed the gauze and washed out the uterus and vagina. The membrane has formed again on those places where it was removed. Gave 20 c.c. anti-strep. serum (Pasteur Institute).

Saturday, 20th, 8 a.m.—Passed a bad night, very restless, no sleep. Passed water herself.

Tongue and mouth in the same state. Temperature, 103.4°; pulse, 120; better. The pustular rash has nearly disappeared. Uterus again washed out. The washing came out as clean as it went in. The vagina stile covered with membrane, but it comes away more readily. Gave 10 c.c. serum (B.I.P.M.).

10 p.m.—The patient is not so delirious. The brain seems clearing. Taking liquid nourishment well. The rash has disappeared. Temperature, 102.8°; pulse, 118. Abdomen still distended and tympanitic. Washed out vagina only. The membranous stuff is coming away fast. The stench is not so great. Gave 10 c.c. serum (B.I.P.M.).

Sunday, 9.30 a.m.—Passed a quieter night; no sleep; only occasionally talking nonsense. Mouth and tongue in same condition. Breath not nearly so unpleasant. Temperature, 102°; pulse, 112. Decidedly better. Abdomen still distended, but not so painful. Washed out vagina, and gave 10 c.c. serum (B.I.P.M.).

9 p.m.—Took liquid nourishment fairly well all day. Temperature, 101.8°; pulse, 112. Abdomen not so distended. Very little stink. Washed out vagina. Gave 10 c.c. serum (B.I.P.M.), and also a hypodermic of morphia.

Monday, 22nd, 9.30 a.m.—Passed a good night, slept for 5 hours; perspired freely. The mind is quite clear now; there is no memory of anything that has transpired. Taking nourishment well; tongue getting moist at tip and edges. Temperature, 101°; pulse, 108. Abdomen going down; palpation is not painful; can make out the fundus of the uterus to be about midway between the umbilicus and pubes. Washed out vagina. The membrane is nearly all away, the passage is looking healthy; a large perineal wound is granulating. Gave 10 c.c. serum and a tabloid of 4 grs. of calomel.

10 p.m.—Taking food well; B.O. 3 times; mouth and tongue moist and clean; face looks bright and cheerful. Temperature, 100°; pulse, 96. Washed vagina, and gave 10 c.c. serum.

Tuesday, 23rd, 9 a.m.—Passed a good night; feels well enough to get up. Temperature, 99°; pulse, 96. Tongue clean and moist; abdominal distension disappearing fast; washed out vagina, very little discharge, no unpleasant smell. Gave 10 c.c. serum.

9.30 p.m.—Continuing to improve; B.O. once; urine quite clear for first time. Temperature, 100°; pulse, 96. Washed out vagina, and gave 10 c.c. serum.

Wednesday, 9 a.m.—Slept all night, taking solid food, bright and cheerful. Temperature, 98.4°; pulse, 80, quite normal. Abdomen only slightly tympanitic; very little distension;

only trifling discharge from vagina; no membrane. Gave 10 c.c. serum. Instructed the nurse to keep the vagina clean.

Hereafter there is nothing of importance to record. The patient has made an uninterrupted recovery. In all 100 c.c. of serum was used—20 c.c. from Pasteur's Institute; the remainder was dry serum from the B.I.P.M.

No unpleasant consequences of any kind followed the injections. There was no pain beyond the prick of the needle. The skin of the whole body peeled off in dust and large flakes, such as one sees after an attack of scarlet fever. The hair came out in great quantities.

Now that this is a case of profound general sepsis is proved by the general symptoms, the intensity of the peritonitis, and the widespread septicæmic eruptions. I am satisfied that she owes her recovery to the free use of the anti-streptococcic serum. For apart from the antiseptic treatment of the uterus and vagina, the giving fluids as much as possible, no other treatment was adopted. I did, it is true, give a quinine mixture at the beginning of the case, but this was merely "for the sake of those who stood by."

I am not aware of any treatment by drugs likely to be of the least use. Personally I never use any of the recent coal tar derivatives, for they merely mask the symptoms, depress the heart, without in any way attacking the disease.

One cannot under-rate the importance of the local treatment. But this, so late in the case, could not of itself have been sufficient.

I curetted the uterus because in one of the washings I came across placental tissue. Up to this time I had believed the uterus to be empty; though its great size should have warned me that such was not the case. I have, on several occasions, curetted an empty uterus under similar conditions, but it has always been with fear and trembling. We all recognise that that procedure is useless, and fraught with danger: for in removing a septic endometrium with the curette one runs the risk of removing tissue whose absorbent vessels have already undergone obliteration from the inflammatory process, and would thus certainly open up fresh channels for the re-infection of the patient. That unfortunate result undoubtedly followed in this case, for the same afternoon as the operation the patient was seized with rigors; there was a great increase in the peritonitis, and a fresh outcrop of septicæmic rash, etc. Of course, a uterus not empty must be emptied. I owe many thanks to Dr. Clemons, for his valuable help and kindly advice.

CONDENSED WATER.

By R. R. HARVEY, M.B., CH.B., MEDICAL
OFFICER OF HEALTH, NORSEMAN, W.A.

THE population of a large part of the gold-fields of Western Australia depends for their existence upon the distillation or condensation of the vapour of salt water. A preliminary to the occupation of any place is the erection of a condenser, and were the manufacture of condensed water to suddenly cease, unless there had been recent rains, the immediate exodus of the whole population would alone save their lives. The old rock of the country is granite. The intrusive rock is diorite in vast fissures. All the water in the diorite country is hopelessly salt. On the granite the water is fresh, but requires conservation in dams. There are round holes formed by sea action on some of the out crops of syenite, sometimes containing a round boulder which has helped in the formation. These are very valuable tanks. Fissures in syenite are also found cleaned out by the aboriginals. An aboriginal said, describing the country: "Plenty water, no gold; plenty gold, no water"—a good aphorism. The making of tanks and dams is very expensive, and it must be a long time before the country can be supplied with them.

Salt water is mostly obtained by digging shallow wells on the dry lakes or in their vicinity. It varies very much in percentage composition, being sometimes fresh enough to bathe in, and at others a saturated solution in which a dip soon becomes a torture.

Wells on land, as the colloquial term is, are very variable in the composition of the water. Some are very salt, while in the immediate vicinity, at a different depth, much fresher water is got.

The condensation of the water is conducted after a method which has been evolved by actual work, that is, which has grown up from experience, and owes nothing to any special invention. In the majority the water is drawn up by windlass and bucket, poured into a small tank, whence it runs to a little tank beside the boiler, which it automatically supplies. The boiler is a malt tank, set in stone foundation. It has, besides the feed pipe, a steam pipe, and a blow-off through which the deposited salt is got rid of. The water should be kept always at a certain height in the boiler, as, the salt being caked on the sides, the heat causes the chlorides and sulphates to give up their respective gases, which, passing over with the steam, form muriatic and sulphuric acids.

This water is known as burnt or smoky water, from its taste. From the soldering of the vast array of galvanized iron in the cooling or condensing apparatus, these acids eat the lead and other metals, so that condensed water may be found to be highly poisonous, from the presence of salts of the poisonous metals. In the usual condenser the water is run while still hot into open tanks on or partly let into the ground. Here we have the conditions favourable for bacterial contamination. The dust of the diorite soil is very fine, and of a cement-like character, and being very light, unless there has been recent rain, it rises with every wind, and a depth of several inches of dust may be laid in a few hours. Around the condensers are camped men (nearly always without sanitary accommodation), horses, camels, cattle, sheep and dogs, so that you may expect to find in the condensed water sold to the public any of the pathogenic microbes affecting man or any of the domestic animals.

The reception tanks rarely being entirely empty from the time they are placed in position to the time they are discarded as worn out, and being open at the top, you necessarily also find the usual water fauna and flora of tanks, sometimes in great luxuriance.

A peculiar anæmia is prevalent on the gold-fields, believed by the people to be due to the want of fresh vegetables and the use of tinned food. At the present time, fresh meat and vegetables are more common than hitherto, yet this anæmia is more prevalent. I have found some of these cases to be due to chronic lead-poisoning, and, in view of the difficulty of detecting lead, even when in considerable quantity, I have come to the conclusion that a very large proportion of these cases are due to the same cause. That is to say, for one case presenting symptoms upon which you can found a clinical diagnosis, there will be several in which there are no symptoms which are pathognomonic and still the patient is anæmic, wasted, and unable to follow his occupation.

The most important injurious chemical contamination of condensed water is lead. When the water is badly condensed its presence is very evident by the ordinary analytical tests. It is also obvious by its symptoms, anæmia, with dental blue line, and miscarriage in women being the most often brought under the notice of the practitioner. The conclusions I draw from experience are, that the condensing of water should be under competent supervision, and the people of the goldfields should be stimulated to provide ample supplies of fresh water in all centres as early as possible.

PROCEEDINGS OF BRANCHES.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE regular meeting of the Branch was held at the Royal Society's Room on Friday, 30th June, 1899. Present:—Dr. E. T. Thring, president, in the chair; Drs. Tidswell, Cosh, S. H. Hughes, Hinder, Megginson, Taylor Young, Knaggs, Hankins, Flynn, Crago, Chisholm, Jamieson, Shewen, FitzPatrick, Gledden, Mills, Gordon Craig, Worrall, Newmarch, Macdonald Gill, West, Coutie, Pockley, Fairfax Ross, Binney, Maitland, F. W. Hall, Morgan Martin, J. A. Dick, Bowker, Isbister, Sinclair Gillies, MacCulloch, Read.

The minutes of the previous meeting were read and confirmed.

The President announced the nomination of the following gentlemen:—Dr. Harvey, Manly; Dr. Belli, Walgett; Dr. Simpson, Hill End; Dr. Gaden, Grenfell; Dr. Müller, Sydney; Dr. Broinowski, Hay; Dr. Neale (late of Christchurch, N.Z.), Sydney; Dr. Bray, Wingham.

Dr. S. H. HUGHES read some notes on "Eye Symptoms in Some General Diseases," and exhibited two patients to illustrate his paper. Dr. Pockley's remarks on Dr. Hughes' paper will appear with the paper itself next month.

Dr. MILLS read some "Notes on a Case of Pulsating Exophthalmos." (See page 289.)

Mr. HANKINS said: When Dr. Mills' patient first presented herself at the hospital, she had been sent on to him to report as to the state of the hearing organs. He found evidences of past middle ear suppuration, but nothing bearing directly on the present condition. The appearance of the eyeball struck him as being exactly similar to those of cavernous sinus thrombosis, or at any rate as indicative of pressure on that vessel, but the symptoms did not point to infective thrombosis. Later on, he had verified the presence of "bruit" by auscultation, and had no doubt as to its being aneurismal. The suddenness of the onset of the tinnitus probably pointed to rupture of the carotid artery into the sinus, and he thought ligature of the artery would be the proper treatment. It must be borne in mind that several cases have been reported where all the symptoms mentioned in the case under consideration were present, and yet probably no aneurism existed, as the cases were cured by rest—the explanation being that there was a thrombosis of the sinus causing pressure on the artery and consequent bruit, the exophthalmos being produced by the dilated ophthalmic veins, and the pulsation by communicated impulse of the artery. In this case the bruit was too pronounced and diffused to be explained by this theory, and he quite agreed with the diagnosis of the gentlemen in charge of the case.

Dr. POCKLEY in commenting on Dr. Mills' case said: I had an opportunity of seeing this case at the Prince Alfred Hospital. I think there can be little doubt as to the correctness of the diagnosis. As to the methods of treatment they are practically three, electrolysis, compression and ligature. Electrolysis, though it has given good results without accident, I should hesitate to try, digital compression in non-traumatic cases is always worth trying. Many cures are recorded. One was in a railway guard, who used to compress his own carotid as he got time in the intervals between the stoppages of

the train. Dr. Hinder agrees with me that in the patient now shown the exophthalmos and pulsation are less than when we saw her first, two or three weeks ago, and this may be attributed to the fact that since the demonstration of the stoppage of the pulsation and noise in the head by pressing on the artery, she has of her own accord been compressing the vessel. Moreover, if compression does no good, it can do no harm, and may do good in another way, viz., by opening up the collateral circulation, and so lessen the risks to the brain, should the ligature be necessary. In this case, therefore, I should try digital compression first, and if this failed, proceed to ligature the internal or common carotid.

Dr. HANKINS said that the establishment of the collateral circulation by compression was just what one wanted to avoid, as it lessened the probability of success by ligature if the latter became necessary.

Dr. POCKLEY said he bowed to Dr. Hankin's larger experience in the surgical treatment of aneurisms, but he (Dr. Pockley) was speaking from the point of view of the risk to the brain, as serious and even fatal results sometimes followed the sudden cutting off of the blood to the hemisphere, by ligature. This risk was lessened, if the collateral circulation were previously established—an argument used in favour of compression by Sattler himself, who was the chief authority in these arterio-venous aneurisms of the carotid in the cavernous sinus.

Dr. WORRALL exhibited some ovarian teeth. The specimen consists of an irregular bony plate, to which are attached three perfect incisor teeth. It was removed by abdominal section from a young girl on April 25th, 1899. The operation was undertaken for peritonitis due to axial rotation of the pedicle of a dermoid cyst of the right ovary. The left ovary was also the seat of a dermoid cyst containing hair and this specimen. Drainage was used. The convalescence was marked by a severe attack of diarrhoea, but ultimately the patient made a good recovery. Dermoid cysts of both ovaries are rare. Howard Kelly says he has only once seen the condition bilateral in twenty-one instances of the disease. Teeth must be a rare product, for although I have removed many dermoids, I have never before met with teeth.

Dr. WORRALL read a paper on a "Case of Cholecystotomy." (See page 281.)

Dr. HINDER said: Dr. Worrall is to be greatly congratulated on the success which attended his efforts, for cases of impacted gall stone in the bile ducts are usually accompanied with a great deal of inflammatory trouble which necessarily complicates the difficulty of incising the duct and removing the stone. I have, myself, operated on two cases of gall stone impacted in the common bile duct, and in the hepatic duct. I mention these now because the method of drainage was different, and the recovery from the operation was good. Both these cases had biliary colic with jaundice, and high temperature accompanying the attacks. The first one operated upon fifteen months ago presented no very serious difficulties; five stones were removed from the common bile duct, and about eighteen from the gall bladder. In the second case the gall bladder was with difficulty found at all, and was about the size of a pigeon's egg, and contained three gall stones. A matted mass of intestine and omentum had to be gone through before the hepatic duct was reached, in which were three stones, and two others in the common bile duct were pushed up into the opening, crushed, and extracted. A large

rubber tube was placed over the opening and held in position, while a thick roll of gauze was wrapped round the tube for its whole length, then the omentum and intestine were adjusted round the gauze. The whole was kept firmly in position till the abdominal wound was partly sutured. The gauze soaked up the bile till lymphoid adhesions had shut off the general peritoneal cavity, and excess of bile came out through the tube in a little over two hours time. At the end of two days an anæsthetic was given, and the sodden gauze easily removed. The tube was shortened gradually, and removed in about twelve days. Doubtless each case demands its own method of drainage, and the operator alone is competent to decide the method adapted to the case in hand. However, the result of this method in my own cases was very satisfactory.

Dr. THRING congratulated Dr. Worrall on the successful issue of a difficult operation. The details of technique in such cases are of interest. As bearing on this, he (Dr. Thring) noticed that Dr. Worrall had not made any mention of Halstead's hammer-shaped guides or sound. These are made in various sizes, and are designed to facilitate the suture of tubes or ducts in which it has been necessary to make an incision. They are especially useful in dealing with the common bile duct, and with the ureters. When the head of the hammer is introduced into such a tube, say the common bile duct, the flow of secretion is blocked during the necessary manipulation, the handle of the hammer, which is set obliquely into the head, can be used for lifting the duct towards the surface, and thus more easily within reach, and the head while lying in the duct so distends it, that instead of having to pick up an empty, soft, flaccid tube and suture it, a most useful guide is supplied for the introduction of the needle. When the last two sutures are in position, but not tied, the head of the hammer is slipped out of the duct and the sutures are tightened.

With reference to the plan of drainage adopted by Dr. Hinder, in one of the cases he has spoken of. It is practically, that which was advocated some time ago by Mr. Mayo Robson in his lectures on the surgery of the bile ducts, the only difference being that Mr. Robson uses a glass tube instead of a rubber one.

Dr. SYDNEY JAMIESON exhibited some pathological specimens, which he described.

Dr. FRANK TIDSWELL reported that he had made a microscopical examination of the tumour of the kidney exhibited by Dr. Nash at the last meeting. The growth was found to be a malignant adenoma. Sections of the tumour were exhibited.

Dr. S. H. HUGHES gave notice that at the next meeting he would move the following alteration to Article 28:—"All members of council to retire annually and (subject to Rule 42 one-third of them shall be ineligible for re-election until the expiration of two years. For the first two years following the passing of this rule the retiring four councillors shall be determined by ballot and thereafter the four senior member to retire." This rule to come into force at the next election.

N.S.W. BRANCH B.M.A.—DONATIONS TO LIBRARY.

THE Hon. Librarian desires to acknowledge, with thanks, the receipt of volumes from the following gentlemen, as donations to the library:—Dr. F. W. Elaner, Moree; Dr. R. W. Young, Milton; Mr. J. R. G. Adams, Librarian, Public Library, Museum, and Art Gallery of South Australia, Adelaide; Dr. A. MacCormick, Sydney.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

OTAGO SECTION.

MEETING held May 31st, 1899. Present:—Dr. Closs (Vice-President, in the chair), Drs. Emily Siedeberg, Batchelor, G. P. Brown, Colquhoun, Ferguson, W. M. Macdonald, Truby King, McKellar, Ogston, Roberts, Riley, Smith.

Dr. COLQUHOUN moved: (1) "That the question of obtaining Government Sanatoria for Consumptives be referred to the next annual meeting of the New Zealand Branch." (2) "That the Dunedin City Council, as Board of Health, be asked to distribute leaflets containing instructions regarding the prevention of infection of tubercular disease." The proposals were seconded by Dr. OGSTON, and carried. A deputation consisting of the President, Secretary, and Drs. Colquhoun, and Ogston was appointed to wait on the City Council with reference to the above objects.

Dr. RILEY showed a gangrenous appendix vermiformis passed *per anum* during an attack of appendicitis.

Dr. OGSTON read a paper on "The Bacteriological Treatment of Sewage." (See page 290.)

Dr. CLOSS, KING, COLQUHOUN, and FERGUSON made remarks bearing on the paper, and all united in their expressions of appreciation of Dr. Ogston's comprehensive and valuable account of the modern method of sewage disposal.

Dr. TRUBY KING read a paper entitled "Suggestions as to a Practical Abattoir Standard for Ascertaining the Fitness of a Carcase for Human Consumption." He referred to the importance of the subject, and showed by specimens of meat which he had taken the trouble to bring down to the meeting, how it might and does happen that occasionally carcasses of meat are passed by the Inspector of Abattoirs which are not fit for human consumption as judged by a properly high standard. Dr. King advocated a closer system of inspection than at present obtains at the Dunedin Abattoirs.

Dr. King was supported in his statements by Drs. OGSTON, ROBERTS, COLQUHOUN, and BATCHELOR, and as the outcome of the discussion, a deputation consisting of Drs. King, Ogston, and Roberts, was appointed to wait upon the Mayor of Dunedin and urge upon him the necessity of insisting on a higher standard of meat inspection.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE annual meeting of the Branch was held at the University on June 29th, 1899. Present: The President (Dr. Swift), Drs. Henderson, Corbin, Cleland, H. H. Wigg, Gunson, London, Brummitt, Harrold, Gault, Marten, A. A. Hamilton, Stirling, T. K. Hamilton, Russell, Michie, J. Evans, G. C. Hayward, Cavenagh-Mainwaring, Good, Sweetapple, Morgan, H. M. Evans, A. E. Wigg, Poulton, Todd, Professor Watson, and the Hon. Secretary (Dr. W. T. Hayward)—Dr. Dunn as a visitor.

Minutes of last meeting read and confirmed.

The PRESIDENT drew the attention of members to a so-called "Central Medical Benefit Club" which certain persons were endeavouring to form, and stated that the subject had been considered by the Council, and had been unanimously condemned.

The TREASURER presented his Statement. Adopted.

ASSETS.					£	s.	d.
Cash in Bank	192	18	2
Subscriptions	Paid since Audit				8	0	0
„	Unpaid	42	0	0
					<hr/>		
					£243	6	2

The SECRETARY read the Parliamentary Bills Committee's Report. Adopted.

"The Parliamentary Bills Committee have the honour to report that the Health Act of 1898 has engaged their attention during the past year. Various amendments were suggested, and were handed to Mr. Glynn, M.P., who kindly consented to bring them before the House of Assembly. Some were passed, but the Committee regret that others which, in their opinion, would have improved the Act were either not introduced or were rejected. The thanks of the Association are due to Mr. Glynn for the trouble he took in conferring with members of the Committee, and in endeavouring to impress their views on the House of Assembly."

NEW MEMBERS.

The following gentlemen were elected members:—Henry O'Halloran Giles, M.B., B.S., Glenelg; Claude Tidswell Cooper, M.B., Ch.B. Melb., Glenelg; Fred D. Jermyn, M.B., Ch.B. Melb., Mount Gambier; Christina Love Goode, M.B., B.S. Melb., Adelaide.

ELECTION OF COUNCIL.

There being no opposition, the following gentlemen were appointed:—President, Dr. Marten; Vice-President, Dr. Brummitt; Treasurer, Dr. Corbin; Secretary, Dr. Gunson; Ordinary Members of Council, Dr. Swift (*ex officio*), Dr. W. T. Hayward, Dr. C. E. Todd, Dr. W. A. Verco.

Drs. Stirling, Borthwick, H. H. Wigg, with the President and Secretary, were elected the Parliamentary Bills Committee.

Dr. J. B. Gunson was elected Local Editor of the *Australasian Medical Gazette*.

The retiring PRESIDENT (Dr. Swift) delivered his address (see page 269), and introduced his successor, Dr. Marten.

Dr. MARTEN briefly thanked the members of the Board, and moved in a eulogistic speech a vote of thanks to Dr. Swift for his address and his conduct in the chair during the past year. Seconded by Dr. STIRLING, and carried.

Dr. SWIFT replied.

Dr. BRUMMITT moved, and Dr. LENDON seconded, a vote of thanks to the members of the late Council. Carried.

Drs. CORBIN and HAYWARD replied.

The Secretary was instructed to thank the Council of the University for the use of the room in which the Branch has held its meetings.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting was held in the rooms on Wednesday, June 21st, at 8 p.m. Present:—The President (Dr. Kenny, in the chair), and Drs. A. V. Anderson, Kent-Hughes, Springthorpe, Lilian Alexander, Gertrude Halley, Nibill, Finlay, Willis, Black, Officer, Stevens, Griffith, and J. R. M. Thomson.

The minutes of the previous meeting were read and confirmed.

EXHIBITS.

(1) Dr. KENT-HUGHES showed a case of talipes improved by apparatus, and another of diffuse alopecia areata cured by antiseptics and counter irritants.

A discussion followed, in which Drs. FINLAY, WILLIS, and SPRINGTHORPE took part.

(2) Dr. OFFICER showed a new ear channel, with refuse pipe, which was discussed by the PRESIDENT and others. He also showed the specimen and correction from Dr. Esteis' Case of Appendicitis, and read his notes. (*Vide* next issue of the *Gazette*.)

Dr. HALLEY then read her paper. (See page 288.)

The PRESIDENT congratulated Dr. Halley upon her excellent paper. She was the first lady member of the Branch to show cases, and also to read a paper. Drs. GRIFFITH, SPRINGTHORPE, and KENT-HUGHES also congratulated Dr. Halley, and a general discussion followed. Dr. Halley suitably replied.

The meeting then adjourned.

AT THE MAY MEETING

Dr. CHERRY referred to the interesting and wide-reaching results embodied in Dr. Springthorpe's paper. From a bacteriological point of view there is no hard and fast line of demarcation between the colon and typhoid groups of bacilli. Of single tests the Widal reaction is the most important, but this is not sufficient to enable us to make an absolute differentiation in all cases. Bacteriological results already attained were gradually leading us to modify our conception of what typhoid is clinically, just as bacteriology has completely changed our conceptions of diphtheria. A child with no symptoms but a chronic nasal discharge is not a case of clinical diphtheria, but yet such a case might give the disease in a virulent form to another child. Yet the identity of these two conditions was never suspected till the same bacillus was discovered in both. With regard to the present views as to the relationship of the colon and typhoid groups, it must be remembered that from the spleen in probably all cases of typhoid a series of organisms may be isolated beginning with typical typhoid and ending with typical colons. Moreover, most, if not all, pure cultures of typhoid could, by artificial methods of cultivation, be made to produce indol and to ferment glucose. As to the way in which pure cultures lost their power of reacting to Widal's test, there were two things to be remembered. (1.) A culture from a spleen, though apparently pure typhoid, may really contain a small admixture of colons. It is well known that in fractional cultivation the colonies, on a gelatin plate, do not all start from a single organism. The tendency which typhoid bacilli have to remain locked together by their cilia makes it very probable that many so-called pure cultures have started from more than one organism. Hence a culture apparently pure typhoid, but containing a small element of colons, might react when first isolated, but after lying dormant for twelve months the colon element would come to the front, and the power of reacting be lost. (2.) In waters suspected of having caused typhoid fever, organisms are often found which react to typhoid serum when first isolated, but lose this power on sub-culture. He regards these as abnormal colons, but at present no precise information can be given as to their relationship to typhoid. The organism mentioned by Dr. Springthorpe as having been isolated from Yan Yean was one of these, for a sub-culture kindly furnished some months ago by M. de Bavay no longer reacted to strong typhoid serum.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 28th July, at 8.15 p.m.

Business:—General.

G. T. HANKINS, Hon. Secretary.

PROCEEDINGS OF OTHER SOCIETIES.

ROYAL SOCIETY OF TASMANIA. — MEDICAL SECTION.

THE monthly meeting was held on May 3rd, when the following members were present:—Dr. Bright (President, in the chair), Drs. Crouch, Clarke, Wolfhagen, Drake, Anderson, Ireland, Butler, Spark, and Spratt. Dr. Hogg (Launceston), and Dr. Stuart (Ulverstone) were present as visitors. Dr. Barnard sent an apology.

After the confirmation of the minutes, Dr. Hogg read a paper on "Some of the Rarer Forms of Eye Disease." (See page 282.)

THE PRESIDENT proposed a hearty vote of thanks to Dr. Hogg for the interesting paper, and complimented him on the excellent drawings.

THE SYDNEY AND SUBURBAN PROVIDENT MEDICAL ASSOCIATION.

THE usual Quarterly Meeting was held at 121 Bathurst Street on Tuesday, 11th July. Present:—Dr. Worrall (in the chair), Drs. Walton Smith, Perkins, Cooley, Green, Litchfield, O'Gorman Hughes, Menzies, Abbott, Parker, Binney, Crago, McDonald Gill, Carruthers, and O'Hara.

The usual dividend was declared, which left a small surplus to be carried to the reserve fund.

MELBOURNE OPHTHALMOLOGICAL SOCIETY.

THE last year of the century has with the inauguration of the Ophthalmological Society of Melbourne, seen the addition of another society to the already three existing Medical Societies in Victoria.

The first general meeting was held on the 22nd, of February, when Dr. A. S. Gray was elected president for the year, Dr. J. T. Rudall vice-president, Drs. Gault and Hughes members of committee, and Dr. Percy Webster hon. sec. and treasurer.

The society numbers already upwards of twenty members. The meetings are held at the Eye and Ear Hospital by permission of the committee of management, and the secretary of the hospital has promised to afford every facility for the prosecution of the society's work.

The first ordinary meeting was held on April 26th, the President (Dr. A. S. Gray) in the chair. There were present:—Drs. J. T. Rudall, J. P. Ryan, Jamieson, Gault, J. F. Rudall, Lister, and P. Webster. Dr. J. P. Ryan showed a "Case of Partial Blocking of the Central Artery of the Retina." It was that of a woman aged 61, who had noticed that the right eye was blind three or four days before. There was faint perception of light. The appearance of the disc suggested partial thrombosis of the artery or incomplete embolism. There was nothing in the general condition to throw light

upon the cause. There was a history of a needle having penetrated the orbit some weeks before, followed by a "swollen eye," and it is possible that the nerve may have received some injury, or been implicated in inflammation of the cellular tissue.

The case aroused considerable interest, and Dr. Ryan promised the members another opportunity of seeing it.

Dr. Gault read a paper on "Interstitial Keratitis on Acquired Syphilis," and showed two of three cases that had come under his notice. A woman *et* 56, who said she had noticed a film coming over the right eye from the outer side six weeks before. For a month previously the eye was inflamed. There had been no great pain, but photophobia and lacrymation. She was the mother of fourteen children, and had had no serious illnesses. Twelve years ago had a bad miscarriage; last confinement soon after, twins; both died, one at nine months, the other at four, of "wasting disease"; has had two miscarriages since then. There is a patch of superficial infiltration extending inwards over the right cornea; the infiltration is not very dense, except near the margin where a dilated vein dips in. There are numerous twig-like vessels in the superficial layers, which give a dull red appearance to the surface.

The other case was a man *et* 38. The right eye has been inflamed and getting dim eight days. There is well marked general interstitial keratitis. Iris muddy, moderately dilated. There are no vessels. The patient had a chancre four years ago. He had no secondaries. A year later he married, and since then his wife had miscarried twice. Teeth much worn, but nothing typical of congenital syphilis.

Dr. Gault remarked that the first case was undoubtedly one of true interstitial keratitis. In the other two cases only a strong presumption of syphilis can be raised.

Dr. J. P. Ryan drew the attention of members to a case he had, then in the hospital, of dense interstitial keratitis with iritis, in a man who had acquired syphilis.

The president asked what treatment had been adopted, and if there was any response.

Dr. Webster had some hesitation in accepting Dr. Gault's two cases for what they were shown. In the man, though other members disagreed with him, he still thought there was in his physiognomy evidence of hereditary syphilis; he would like Dr. Gault to see, and report on other members of the family. In a woman of 56, the evidence given of syphilis was very inconclusive. The appearance of the keratitis rather suggested a traumatic origin.

Dr. Webster showed the following cases:—
 “Bilateral Optic Atrophy in a man suffering from Lateral Sclerosis, who had had Syphilis.” Optic neuritis and vitreous opacities, which had followed prolonged exposure to the fumes of exploded dynamite.

“Recently Acquired Exophthalmic Goitre,” in a man *æt* 64, in which the tributaries of the ophthalmic veins were dilated, probably from some obstruction in the cavernous sinuses.

The next meeting of the society will be held on 28th of June. Those desiring to become members, are requested to communicate with the Hon. Secretary, 34 Collins Street.

EXTRACTS FROM FOREIGN MEDICAL LITERATURE.

BY WALTER SPENCER, M.D., ENMORE, N.S.W.

LE NORD MEDICAL, Lille, March 15th.—It is related of Dr. Desprez that having, on one occasion, made a thorough *rectal examination*, and having named his fee, Fr. 50, the patient considered the amount exorbitant. The doctor at once tendered him Fr. 100, politely suggesting that the patient should perform the same manipulations on the doctor. The patient preferred to pay up.

Dr. Moty reduced a complete backward dislocation of the thumb by keeping the hand flexed and pronated, so as to arrest action by the long flexor, seizing the thumb by placing his two index fingers below the metacarpal head and his thumbs on the dorsal aspect of the base of the phalanx, exerting the double opposite pressure progressively and gently, at the same time raising the phalanx towards a right angle. At the moment of reaching a right angle the dislocation was suddenly reduced.

Les Nouveaux Remèdes, February 24th, gives Dr Legrand's *anæsthetic hæmostatic* for dental operations:—

Gelatin, pur. ...	2.0 grammes
Sod. chlorid., pur. ...	.70 "
Phenol, pur. ...	.10 "
Eucain hydrochlor. B. ...	.70 "
Cocain " ...	.30 "
Aq. dest., q.s.p. ...	100 c.c.

To be used according to Bechis' method.

A small pad of absorbent wadding, soaked in this solution, is applied outside the tooth, and the patient instructed not to swallow his saliva. The mucosa becomes insensitive, in a few minutes the hypodermic needle can be inserted, and the mucosa becomes blanched. Push the needle home from the margin, and push deeply, the longer the root the deeper the insertion—for a canine or large molar, one to three c.m. Repeat the same operation on the other side of the gum, if necessary in two places, so as to surround the alveolus with injected fluid. Wait for three minutes, then carefully expose the tooth or stump. The patient will feel nothing, therefore secure a good hold. Adjust the forceps and loosen the tooth with a to-and-fro movement gradually. Draw it without any violent jerk. When the tooth is out, its cavity will be filled with a bright red velvety fibrinous clot, and hæmorrhage will be stayed. The mouth may soon be rinsed; hæmostasis is complete.

When a tooth is broken during extraction, instead of a flow of blood hiding the roots and compelling the dentist to use his finger as a guide for the forceps,

with the prospect of bringing away a piece of the alveolus, it will be found that the hæmostatic solution has arrested hæmorrhage and indicated the spot by a bright red fibrinous clot, which, being brushed away, will enable him to attack the roots one by one. Secondary hæmorrhage has never been observed. Cases of *Hæmophilia* are related in which the surprising result was equally good.

In cases of *Soabier* Dautrelepoint has been employing ointment of Eudermol, 1 %, with great success.

Gaceta Medica Mexicana, February.—Dr. Abogado gives a study of *Narcein* which he finds superior to Codein as a calmative of insomnia and cough in phthisis, and the best remedy for the obstinate *insomnia* of chronic alcoholism and of insanity.

As an analgesic he finds it to succeed where opium fails.

Narcein, pur. ...	.30
Glycerin ...	4.60 dissolve with heat and add
Hydrochloric Acid ...	.10
Aq. dest. ...	1.10

THE INTERCOLONIAL MEDICAL CONGRESS OF AUSTRALASIA.—FIFTH SESSION.

(To the Editor of the Australasian Medical Gazette.)

SIR,—As already announced, it has been decided to hold the Fifth Session of the Congress in Brisbane, from the 18th to the 23rd of September.

Circulars have already been issued to medical practitioners in the various colonies, and the response to invitations to membership has so far been encouraging. Circulars have also been sent out by the Sectional Secretaries soliciting papers, and a second circular will shortly be issued, giving office-bearers of Congress, fares, etc. It is urgently desired by the Executive Committee that medical men will enrol without delay, and that those intending to visit Brisbane will inform the General Secretary of their intention as early as possible. A list of hotels and boarding houses will appear in our next issue, when members are advised to secure accommodation in advance.

It is further urged by the Executive Committee that members proposing to contribute papers will forward notice of their intention as early as possible, together with titles of their papers, to the Sectional Secretaries or to the Local Secretary of their colony.

The railway authorities of Victoria, New South Wales, South Australia, Tasmania, and New Zealand have agreed to allow single fares for the double journey to and from Brisbane to members and their wives attending Congress. Victoria, in addition, promises holiday rates to country members to and from Brisbane. South Australia has made the reduction conditional that at least six persons avail themselves of the concession.

The Queensland Government has promised free passes over all Queensland railways for one month to members and their wives, but this is operative only after arrival in Brisbane.

Steamship Reductions.—A. U. S. N. Co., Adelaide S. S. Co., and Howard Smith and Sons all grant 20 per cent. reduction on fares for members and wives. This also applies to trip up the Queensland coast either before or after Congress week, enquiries about which have already been made by some southern members.

In order to secure these reductions, it will be necessary for members to present their Congress tickets, countersigned by the Local Secretary of their colony.

WILTON LOVE, M.B.,
 General Secretary.

Brisbane,
 13th July, 1899.

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

The Australasian Medical Gazette and the British Medical Journal are supplied to all Financial Members of the New South Wales, South Australian, and Victorian Branches Free of Cost.

Subscriptions (£2 2s. per annum) should be forwarded to the respective Branch Treasurers as below:—

New South Wales, Dr. Crago, 18 College Street, Sydney; South Australia, Dr. T. W. Corbin, Adelaide; Victoria, Dr. J. R. M. Thomson, Essendon, Victoria.

The Gazette is supplied to Members of the New Zealand and Queensland Branches by special arrangement with the local Secretaries.

SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

EDITOR'S LIBRARY.

THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
E. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; J. B. GUNSON,
ADELAIDE, S.A.; AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH JULY, 1899.

FEDERATION.

THE date of our last issue—June 20th, 1899—should prove a memorable one in the history of Australian Federation, as on that day the electors of New South Wales, on whom the success of the movement so much depended, declared in favour of Federation under the Convention Bill, as amended by the Premiers' Conference, by a majority of nearly 25,000.

In Victoria the referendum will be taken on 27th inst. Doubtless some further efforts will be made in the Legislative Council of New South Wales to block or delay the matter, but it is not likely that such efforts will prove successful in the face of the decisive majority of votes cast in favour of union.

It is not our intention to question the honesty and sincerity of those who so vigorously opposed the acceptance of the Bill in New South Wales, but at the same time we cannot but regret many of the statements made reflecting on the sincerity and integrity of our cousins in the other colonies. Let us put away narrow local jealousies and rise to the level of a high ideal as Australians. Federation should effectually remove the feeling of distrust and antagonism begotten of provincialism. Healthy rivalry there should be, and if ever Sydney is beaten in the race for supremacy, it can only be, considering her natural advantages, due to lack of energy on the part of her residents.

In some respects the federation of the medical profession has long preceded any political federation, as witness the periodical meetings of the Intercolonial Congress, when representatives of the profession from all parts of the continent meet in one or other capital and unite in an interchange of views and experiences. Again, the various branches of the British Medical Association throughout Australasia are in close touch with one another, and through our columns have a common means of interchange of ideas. In the course of a few years it should be possible to affiliate all the separate branches under one Australasian branch which, after the example of the parent association, would hold its annual meetings in the different capitals in rotation, and so supplant the Intercolonial Medical Congress. We are aware that this could not be under present circumstances, as in one or two capitals strong feeling exists between the branches and other medical societies, but time and judicious conciliatory action on both sides will remedy all this. There are several matters of importance to the medical profession that should be kept well in view in the event of Federation becoming an accomplished fact. In former Editorials (see August 20th, 1897, and July 20th, 1898) we have pointed out the necessity for a University of Australia, whose degrees should be unimpeachable.

It is a matter of great importance that medical legislation should be uniform throughout Australia. Dr. Roddick, the president of the British Medical Association, at the annual

meeting held in Montreal in 1897, in his inaugural presidential address pointed out the state of chaos and confusion that existed in Canada through each state making and maintaining its own medical laws, and at the same time he warned Australians against making a similar mistake. New South Wales, which is the "happy hunting ground" of the quack, would certainly be the gainer by assimilating her medical legislation to that of some of the other colonies. Quarantine is also a matter that must be dealt with in a federal manner, uniformity of regulations in all the colonies being desirable.

THE CENSUS OF 1901.

DURING the now fast expiring nineteenth century, a decennial census has been taken throughout Australia. According to custom the date on which the enumeration is made is the first Sunday after the first day of the month of April of the first year of each decennium. Thus, following this custom, the next enumeration will be made on April 7th, 1901. As this day will happen to be Easter Sunday, it is evident that serious errors are liable to creep into the calculations, more particularly as regards the distribution of the population. In Sydney, for instance, the Agricultural Show, the Randwick Races, the Military Encampment, and other gatherings take place during the Easter holidays, and large numbers of strangers are temporarily residing in the city of Sydney. The population of the metropolis is therefore liable to be overstated, while some of the larger centres in the country may be robbed of many of their rightful citizens.

The census of 1891 was taken on the Sunday following Easter, and many soldiers travelling to their homes from the encampment were, as far as possible, assigned to the districts to which they properly belonged. But at the next census, this will be impossible, for the troops will be stationary, and must be credited to the district in which they are temporarily located. As the enumeration is made only once in ten years it is very evident that any calculations made upon the official figures will be inexact, and may lead to awkward consequences. A later, or an earlier date would be more suitable for the census. We should suggest a month later, say the first Sunday in May, when all will have settled down in their homes.

In a new country like this, the census should be taken more often than once in ten years. A quinquennial census would serve to prevent

many errors in calculation. Owing to a rapidly increasing population, our figures in the later years of the decennium are liable to error. The population, for instance, of Western Australia was in 1871, 25,353; in 1881, 29,708; in 1891, 49,782; while in 1897 it was estimated at 161,924. It has increased by leaps and bounds, so that it is probable that this estimate will be found either above or below the mark, at the time of the next enumeration. A quinquennial census is necessary for countries with irregularly increasing populations. It is not so important in England and European countries having settled or regularly increasing populations. If our estimates of the population of a colony, city, or district be incorrect our calculations of birth or death rate (based upon them) must be inexact. From a Public Health point of view, we must know the correct distribution of the inhabitants.

ABORTION ADVERTISEMENTS.

IN our issues of November, 1898, and June, 1899, we drew attention to the number of advertisements offering to procure abortion published in the New South Wales newspapers. A few weeks ago the Chief Justice (Sir F. M. Darley) referred to the evils that arise from such advertisements, which, he said, are responsible for an enormous secret death rate in the community. He also expressed his amazement that Parliament would not follow the example of the other colonies and pass an Indecent Advertisements Bill, and prevent newspapers from engaging in this abominable traffic.

We are pleased beyond measure that our views are shared by one whose opinion is of such value. Many of the Sydney papers ignored His Honor's words, but we are glad to find that some of the newspapers have boldly denounced such objectionable proceedings.

Truth (July 2nd), in commenting upon the remarks of the Chief Justice, says:—

When methods of preventing conception and of crushing out infant life when it has already taken form are openly and freely advertised, it is inevitable that both the morals and the physique of the community must suffer deadly injury.

But one of the best articles upon this subject appeared in *The Catholic Press* (July 1st), and from this we make the following extract:—

Terrible indeed is that criticism from the lips of the Chief Justice of the province, even more dreadful is it to have to believe that the criticism is founded on a state of affairs which one would imagine impossible in a civilised community. The newspapers of the city are most profitable concerns, and they have no excuse

whatever for fattening on vice. Those engaged in their production make a claim not only to respectability and high social positions, but to be regarded as authorities on all matters concerning the public welfare. They set up as teachers, and are recognised as such by the State, which carries their sheets free of all postage to the uttermost ends of the province. The proprietors and editors have their wives and families, and homes they regard as sacred, yet there can be no escape from the fact that the proprietors of papers that publish invitations to criminal actions are morally as guilty as the abortionists. Their hands are red with the blood of unfortunate girls and unborn children.

Why respectable families admit these papers into their homes is a mystery. Parents have only to study the medical columns to understand the risks to which they expose the innocent. They would kick out a man who spoke with a foul tongue in the presence of their children, yet they tolerate a more deadly foe that comes in the guise of a teacher, and whispers unmentionable suggestions in the ears of their boys and girls. The parents cannot plead ignorance. They have the gift of sight and of comprehension.

Occasionally the public is shocked by a revelation of the results of this horrible alliance on the part of newspapers and professional criminals. But no effort is made to remedy the evil. On one occasion, when the body of a poor girl was found under revolting circumstances, the advertisement of her murderer inviting victims to his lair appeared in the issue of the paper that chronicled his crime and grew indignant over it. The murderer was hanged, while his journalistic partner escaped even a loss of popularity, so benumbed is the moral sense of the community.

Will other newspapers now follow suit and point out to the public the iniquity of such indecent advertisements, and help Parliament to pass a long-needed measure?

LETTERS TO THE EDITOR.

LECTURES ON HEALTH.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Year after year a wail goes up from the souls of thousands of medical men that the task of making a living in the profession is increasingly difficult. Yet we have doctors by the score lecturing on "Health," and unblushingly advocating the adoption of measures for the limitation of disease, and the imperilling of our languishing revenues. With few exceptions, too, these lectures are given by sucklings, and their audiences are mostly composed of old women of both sexes, a sprinkling of tittering girls, and a lonely group of wrinkled spinsters. These innocents take the unctious to their souls that the lectures are for their benefit, and not a covert advertisement for the lecturer, which is only another example of their sublime credulity!

Now if a doctor happens to fall from grace so far as to advertise his hours in the lay press, beyond a few days, of course, up goes an execration of an awful texture from an outraged profession. Then why not mete out the same dose to the man who knows in his heart that his lectures are not so much to cater for those requiring the knowledge as to get a chance to rub shoulders with another's bread and butter.

Again, why are we expected by the public to be less conservative than lawyers? Their professional training is not more costly than ours. And yet who ever heard of a lawyer—unless he was an inspired idiot, and he is not generally built that way—openly advocating cheap law, or shrieking for simplified legal procedure? Then dentists have we, humane and philanthropic no doubt, but do we hear of first aid lectures on dentistry? And a pharmacist sunk in such utter depravity as to teach the art of dispensing to the great unwashed would be instantly signed up as a dangerous lunatic, and very properly too.

But of course some will say I am a cynic, without any of the milk of human kindness in my soul, and that I ought to be impaled for such revolutionary doctrines. The rabid may even say I am positively wicked, and am attempting to subvert the cherished traditions of the dear old profession, in which all hope of more than plain hash for the present, and a nest egg for old age, must be sacrificed to the Christian virtue known as self-denial—otherwise starvation! Well, then all I can say is that of late years the acuteness of the struggle for existence has led me to do a lot of sober reflection. More, it has induced me to join those men who have the bad taste to believe in the first law of nature, and the consignment to Hongkong, or elsewhere, of the public who will forget to succour us when we are old and infirm. And if some of us exhibit a greater respect for the filthy lucre than for the maudlin sentiment preached to us by the curled darlings of the healing craft, who sleep in their cosy beds while the rank and file shiver by the side of Dr. Hardup's tangled progeny, it is because sentiment doesn't silence the clamorous baker, or bring back the smile to the cheek of the bile-stained heathen who brings round the "cabbagee."

The practice of charity is admirable on a full stomach; but when gaunt want and debt stalk through the house the poetry is knocked out of copy-book texts.—I am, sir, etc.,

R. H. T.

Newcastle, July 3rd, 1899.

"THE LAUNCESTON DIFFICULTY."

(To the Editor of the Australasian Medical Gazette.)

SIR,—Under the above heading an article appeared in the *Gazette* of June 20th, which unfortunately contains mis-statements that should be contradicted. It is a pity that before such an article was written a proper enquiry was not made into the circumstances of the case rather than relying upon newspaper information.

The Bill for an alteration in the constitution of the boards of management of the Hobart and Launceston hospitals is not a new one, for as far back as 1896, long before any medical agitation existed, the Government had framed a Bill for an elective instead of a nominee board, but let the matter drop. Under the present method of election, the members of the board simply nominate new members for appointment by the Government. And as the Government supply practically the whole of the funds of the hospitals (except the fees of in-patients who are able to pay a little), they should have the right to elect all the directors on your own argument, for there are no subscribers of stated sums amongst the general public. They are purely Government institutions. The honorary medical staff is also represented on the board, so that this condition is also fulfilled.

You make a statement that the medical profession in Launceston almost to a man are in favour of reforming the medical supervision of the Launceston Hospital. This is not a fact. Indeed, there is not even a majority of the medical men of that city who are desirous of a change. There is, however, a small but active minority. On the honorary medical staff of the Launceston Hospital there are some of the best doctors in the community, and they agree that it would not be to the advantage of the Hospital to alter the present system of medical management.

Whilst entirely agreeing with the principle embodied in the proposed reform with regard to the large clinical hospitals, I think that each case should be judged on its merits, and for the information of the profession would put forward the following facts concerning the Launceston Hospital and its medical management:—

1. The average number of beds occupied amounts to between 70 and 80. There is no convalescent hospital, and cases that would not be admitted into the large hospitals on the mainland have often to be admitted.
2. The average number of new in-patients is two to three daily, and of out-patients about four daily.
3. The surgeon-superintendent is the responsible head of the institution in medical and administrative matters.
4. The medical staff consists of four honorary medical officers and a house surgeon. The honorary staff attends regularly on two days weekly for consultations and to assist at important operations, and when summoned for urgent cases. No important operation that can wait is done without a previous consultation. In cases in which the honorary staff is interested, they attend at irregular intervals in consultation with the resident officers. In such cases, also, it is competent for the surgeon-superintendent, who is responsible to the board, to allow of the honorary officer taking a more active part in the treatment of the case.
5. The board has given the petition of a small proportion of the medical men of Northern Tasmania for reform frequent and earnest consideration. A conference was held in February last between the honorary medical staff, three representatives of the hospital board and the surgeon-superintendent for the express purpose of finding out whether the honorary staff desired any further privileges, and the opinion was then expressed as the result of that conference—"We recommend to the board the continuance of the system at present in operation, and that it would not be an advantage to alter the present system of management. The facilities now given to the honorary consulting staff," it was considered, "afforded all that could be desired."
6. The fees in Launceston are low as compared with other Australian cities, 5s. being the usual fee, whilst nearly one-half of the population are in lodges. Thus the busy practitioner has not the time to devote to more responsible hospital work.
7. All the medical men in Launceston are general practitioners.

Yours etc.,

J. RAMSAY,

Surgeon-superintendent,

General Hospital, Launceston.

July 6th, 1899.

THE TREATMENT OF INEBRIATES.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Will you kindly permit me to rectify a rather serious error which occurs in your leader on this important subject, appearing in the last issue of your very valuable magazine? It speaks of my work at Rest Haven in the past tense, the writer assuming that, on account of financial loss, the Home, or as I prefer to call it, Sanatorium, had been closed. As such a view is calculated to injure "Rest Haven," allow me to state that, although I have lost a considerable sum in the effort to reclaim inebriates, yet the little institution still exists, and carries on its quiet, but none the less efficient treatment of inebriety—another word, recently coined, and more polite, for drunkenness. It is worked on philanthropic lines, for, as the maximum charge is but fifteen shillings a week, while many totally impecunious men are admitted, it is apparent that no profit is derivable from this Home, the only one of its special kind in Australia, I believe. The results of the treatment have been fairly successful. I now admit no man who does not express a sincere desire to give up alcohol altogether, for, my experience of twenty years with about five thousand drunkards, and especially during the past seven years with those under my care at "Echo" and "Rest Haven," has proved that no man can be cured of inebriety against his will.

I have had men for two or three years under my care who broke out drinking soon after leaving my Home, because they never really intended to give it up. On the other hand, many who have not stayed the average term of three months, have become total abstainers. In fact, I find that if a man is absolutely sincere in his wish to reform a short stay is sufficient; whereas, if he is insincere, his residence at the Home is merely a temporary—though voluntary—abstinence, which the very first temptation breaks through.

I agree with most that Dr. Manning, in his excellent paper, states. But, as to legal restraint, I have proved that while the friends of the inebriates, and the public as a whole, benefit by his incarceration in a suitable institution for one, two, or three years—and thus good is done to others—yet the imprisoned inebriate, himself, seldom is "cured." I have had a large number of men under my care who have been compulsory inmates of institutions in England and America, they all tell the same tale as to inefficacy of the treatment in nearly all the cases they know of, amounting, in the aggregate, to thousands. Hence, it will be seen that the treatment, to be effective, must be, in the main, of a moral character; for the disease itself is a moral one in the first place, and is so treated at "Rest Haven;" though, of course, orthodox medicinal remedies, approved by my medical advisers, are not neglected. No liquor, under any circumstances, is given to the patient, who is informed of this, and the first improvement is always noticeable within forty-eight hours. In very bad cases we use bromide and chloral. All patients have to employ themselves in or out of doors, and all improve marvellously in a short time, so that their friends are often amazed at the change a few weeks makes in what were looked on as complete moral and physical wrecks. Yours obediently,

COURTENAY SMITH.

Trafalgar House, 9 Princes-street, Sydney,

July 12, 1899.

P.S.—If the Government would assist me in starting an Inebriate Farm Home, not less than fifty miles from Sydney, or ten from an hotel, I would, through my friends, find the balance required. C. S.

ANNUAL REPORT OF THE MEDICAL OFFICER
OF HEALTH TO THE SYDNEY METRO-
POLITAN COMBINED DISTRICTS FOR THE
YEAR ENDING 31ST DECEMBER, 1898.

THE following is a synopsis of the report of Dr. W. G. Armstrong to the Local Authorities of the Metropolitan Combined Districts of Sydney:—"In presenting you with my first Annual Report as your Medical Officer of Health, I have the honour to draw your attention to the fact that the year 1898 has been a most memorable one in the sanitary history of this metropolis, owing to the new departure in sanitary legislation. With the beginning of the year 1897 the Public Health Act of 1896 came into operation, and under its provisions extensive powers were conferred on local authorities in general and on municipal councils in particular. As yet the provisions of the Act have only been taken advantage of by the majority of local authorities to a small extent, partly, perhaps, because the full extent of the great powers and responsibilities therein conferred have not been fully comprehended; partly, no doubt, for the want of funds to properly enforce the new law. This want of means is a very serious matter to most municipalities. The medical officers of health are not officers of the Board of Health, but occupy a purely municipal position. Their duties are, in brief, to advise the local authorities of their districts in all matters affecting the public health, and on all sanitary points involved in the action of local authorities; to keep themselves informed respecting all influences affecting, or threatening to affect, injuriously the health of their districts; and to inquire into the cause, origin, and distribution of disease. They are required to make an annual report for each year, and to make additional reports to local authorities on any sanitary matters when requested to do so by the local authorities, or without such request if the medical officer of health considers such action advisable. The local authorities are required by the law (P.H.A., sec. 12) to furnish copies of all reports received from the Medical Officer of Health to the Board of Health. The Metropolitan Combined Districts include the City of Sydney and forty-seven other municipalities, as well as certain unincorporated districts within the County of Cumberland. The population of the forty-eight municipalities is estimated at 450,870, with an incorporated area of 127,236 acres.

In the unsewered districts of the metropolis the methods of sewerage disposal in vogue are fairly uniform in general principles though varied as to details. House slops are discharged into the street gutters, and excreta are dealt with on the pail-closet system. As a rule, no dry earth, ashes, or other deodorants are used in the pails. I have, during the year, inspected, for one reason or another, between 1,000 and 1,500 pail closets in the various municipalities, and in less than 10 per cent. of those I have seen has any deodorant been used. I have usually found the contents of the pails in a liquid or semi-liquid state. Most of the municipalities possess by-laws regulating the dimensions and description of pails to be used in pail closets; but when the providing of the pails is left to the householder, as it is in most municipalities, my experience is that such regulations are often not insisted on by the local authority, and as a result some of the pails to be seen in the suburbs are ridiculously ill-adapted for the purpose they are intended to serve. Often the pail is too small. When this is the case the surface of the ground beneath the seat becomes fouled with urine and solid excreta, and the whole closet becomes a

dangerous nuisance. A considerable number of cesspits still exist within the Metropolitan district. Most local authorities are gradually causing the cesspits in their districts to be filled in, but a few are making no effort in this direction on the plea that the pail system is not a success. Now cesspits are rightly discouraged by the Department of Public Health and by all competent health authorities for very good reasons. The System of nightsoil scavenging in the suburbs needs some comment. Four local authorities have adopted the interchangeable pail system. They are those of Burwood, Strathfield, Concord, and Drummoyne. In these boroughs a sufficiency of pails of an exactly similar pattern is provided by the municipality to furnish two pails for each closet. When the scavenger visits the householders' premises he places on the full pail an air-tight cover, which is secured in place by a spring catch, and then removes the pail, replacing it by an empty one. The full pail is placed in a covered van and removed to the depot, where it is emptied and cleansed by steam, and is then ready to replace another full one in turn. The removal of the pails causes no nuisance, and the covered van may pass through crowded streets by day without being offensive in any way to sight or smell. Undoubtedly, this is the ideal system of nightsoil scavenging.

Excepting in the four boroughs mentioned, the unsewered municipalities still cling to the old-fashioned system of open pails and night carts. Under this system the emptying of the pails is a nuisance, so is the passage of the cart through the streets, and the condition of the uncleaned empty pail when replaced in the closet is the greatest nuisance of all. The ultimate disposal of nightsoil has led to some difficulty in the past and the question is one which crops up from time to time. Six local authorities deal with this class of refuse by sending it out to sea in punts. One seaside borough tips directly over a cliff into the deep and constantly agitated sea; the remainder employ burial in some shape. During the year I have inspected seven different depots used for the burial of nightsoil. All were in sparsely-populated districts, and did not, I considered, call for any interference on the grounds of public health. Akin to the subject just discussed is the question of the treatment of infected stools from cases of typhoid fever. Under section 25 sub-section III, of the Public Health Act, the local authority may, and when required by order of the Board shall, provide a separate service for the removal and destruction by fire of the excreta of persons suffering from such fever. I regret to report that few local authorities have availed themselves of the powers conferred under this sub-section of the Act up to the present. The four authorities already referred to as having adopted the interchangeable pail system have set aside a number of pails for service in dwellings infected with typhoid fever. The pails are painted of a distinctive colour, and supplied to all infected dwellings, and removed daily. Besides these, only three municipalities have made any arrangements for specially dealing with typhoid excreta. Such a state of matters is unsatisfactory. I have, during 1898, personally become aware of over thirty instances in which typhoid excreta were buried in the back yards of small allotments. To this cause I attribute many attacks of typhoid fever. It is known that typhoid infection will live and increase in polluted soil for at least a year. It is also known that the infection may be carried by the wind in dust; consequently, a person burying nightsoil infected with typhoid fever in his garden is sowing the seed of a deadly disease, which

later on may attack his neighbours or himself. The dry-earth system of treatment of excreta is admitted on all sides to be the best when sewers do not exist, but to be satisfactory it must be properly managed. The first point is with regard to the description of pails to be used. These must all be of uniform size and shape, and the closet should be so constructed that the pails fit closely under the seat and catch all excreta. These are matters which every town council can enforce the observance of. The interchangeable pail system is far and away the best. It is more sanitary, more cleanly, and more decent than the open pail and night-cart system. It is very desirable that cesspits should be abolished in all populous localities. The scavenging service should be a frequent one. Pans should be emptied at least twice a week. The system must be a real *dry earth* one. The importance of keeping the contents of the pails dry and free from offence by the frequent use of dry earth or ashes should be impressed on householders on every possible occasion by the officers of the local authority.

An inspection of the dairy premises of the Metropolitan Combined Districts was made by me during the year with somewhat unsatisfactory results. Out of a total of 495 dairies in the district only 117 could honestly be classified as good—that is, as satisfying requirements both in regard to the structure of the buildings used in the business and in cleanliness and general good management. Of the remainder, 321 were classed as fair, while 57 were positively bad. It is impossible to enter fully into particulars here; that has already been done in reports to the individual local authorities; but the faults most commonly observed, apart from general filthiness of premises, were faulty structure of milk rooms, permitting free access of flies, dust, etc., to the milk and milk-vessels, and neglect to keep milking-floors clean and in good order. I consider that local authorities generally have not shown sufficient firmness in administering the Dairies Supervision Act, and faults have been condoned in dairy premises which have been repeatedly pointed out by the veterinary inspectors of the Board of Health. It is important to point out in this connection that the requirements of the Dairies Supervision Act and of the Health Department as set forth in the "Manual" under the Dairies Supervision Act do not involve any great expenditure of money on the part of dairymen. Some of the best small dairies I have seen have been constructed of very cheap materials and without the employment of skilled labour, and yet they complied in every respect with the requirements of the Board. Among all the metropolitan boroughs Randwick is the one in which the dairies are most satisfactory, both structurally and as regards the condition in which they are maintained. The dairies of Waverley, Woollahra, Newtown, Botany, Drummoyne, Hunter's Hill, Kogarah, St. Peters, Strathfield, Manly, and Willoughby are also above the average. The most unsatisfactory dairies generally are the very small establishments in which only one or two cows are milked. These small dairies are generally run by persons who have some other occupation, and merely look upon the cow as a means of easily earning a few shillings a week extra. They do not make a business of dairying. They are often registered by local authorities from mistaken motives of compassion though both premises and appliances may be ill-adapted for the production of wholesome milk. It is, however, noteworthy that the very large dairy establishments are not, as a rule, so well kept as many of medium size. During the year my attention has been frequently directed to the conditions under which milk vendors (as distinct from

dairymen) store and dispose of their milk. Two classes of milk vendors must be recognised. The first consists of those who act for the large milk companies. These, as a rule, have fairly good appliances and storage for their business, and generally may be classed with the dairymen. The second class consists of small shopkeepers, who sell small quantities of milk to chance customers throughout the day, and are themselves supplied, perhaps, by any passing milkman. By these people milk is sometimes kept and sold to the public under very insanitary conditions. Many of them have no means of storage for their milk other than a bucket, which is kept on or under the counter in a small, general shop, often exposed without any covering to all kinds of street dirt and dust. It is hoped that before long some further form of regulations for the guidance of milk-vendors will be issued by the Board of Health. In the meantime local authorities should be careful to refuse registration as a milk-vendor to any person whose premises and intended method of storing milk are not satisfactory.

Table showing the Population, Death-rate from All Causes, Death-rates from Zymotic Diseases, Typhoid Fever, Diphtheria, and Tubercular Disease in the Registrar-General's District of Sydney and Suburbs for the year 1898 and the five preceding years per 1,000 living. Compiled from the Annual Reports of the Government Statistician.

Year.	Estimate'd Popula- tion—	Death- rate from All Causes.	Death- rate from Zymotic Diseases.	Death- rate from Typhoid Fever.	Death- rate from Diph- theria.	Death- rate from Tubercu- lar Disease.
1893	394,480	15.57	2.90	.19	.33	1.72
1894	397,530	14.12	2.14	.32	.33	1.56
1895	403,470	13.18	1.68	.20	.21	1.48
1896	410,790	13.66	1.40	.34	.20	1.47
1897	417,250	12.73	1.03	.18	.13	1.31
1898	426,950	15.07	2.12	.17	.16	1.53

Under the heading Zymotic Diseases are included scarlet fever, diphtheria, typhoid fever, measles, whooping cough, influenza, and diarrhoeal diseases. The Registrar-General's District of Sydney and Suburbs does not entirely correspond to the Metropolitan Combined Districts, but omits Parramatta, Granville, Auburn, Rookwood, Dundas, Ermington, and Rydalmere, and Bankstown. It will appear from the Table that the general death-rate of the Metropolis for 1898 was considerably higher than that of any of the four preceding years. Severe epidemics of scarlet fever, measles and whooping cough are chiefly responsible for this increased death-rate. The number of deaths from scarlet fever show an increase from 23 in 1897 to 31 in 1898. Registered deaths from measles sprang from 1 in 1897 to 269 in 1898, and whooping cough which only caused two deaths in 1897, led to 194 in 1898. Scarlet fever was particularly prevalent during the first nine months of the year. The case mortality throughout was small. Although 2,543 attacks were notified to the Medical Officer of Health, only 35 deaths from this cause were registered in the Metropolitan Combined Districts, giving a case mortality of 1.4 per cent. The burden of the epidemic was pretty evenly divided between the various districts, the only marked exception being the small borough of Willoughby, which with a population of 4,500, contributed the heavy total of 124 cases, of which 97 occurred in the first quarter of the year. With regard to measles, influenza, and whooping cough, as none of these affections are subject to compulsory notification,

no correct idea of the extent of their incidence can be given except that furnished by the registration of deaths. Two hundred and ninety-eight deaths were registered from measles, 78 from influenza, and 206 from whooping cough. It is certain moreover, that many more deaths occurred from measles and possibly also from influenza and whooping cough than the above figures represent. I have found on inquiring into several deaths of children that were registered as being due to bronchitis, or other acute respiratory disorders, that the illness which actually caused death had been preceded by measles. It is uncommon for parents, especially among the poorer classes, to obtain medical attendance for children suffering simply from measles, and when a serious complication supervenes and a doctor attends, the rash has usually disappeared and there is nothing to lead the doctor to believe that the fatal illness is really a complication or sequela of measles unless the parents should chance to mention the primary disease, which they very often fail to do. The disease which above all others is dependent upon insanitary conditions for its existence, typhoid fever, shows a satisfactory decrease for the year 1898 over previous years.

The Report also deals with such subjects as Disposal of House Refuse, Notification and Disinfection, Sanitary Inspectors, and various valuable tables are given illustrating Dr. Armstrong's remarks.

HUNTER RIVER SANITARY DISTRICT, N.S.W.

ANNUAL REPORT OF MEDICAL OFFICER OF HEALTH, 1898.

DR. ROBERT DICK, Medical Officer of Health, has issued his annual report for last year, and from it we take the following extracts:—

With one exception (*viz.*, Newcastle, where sewers are provided for carrying off excreta from a portion of the city) conservancy systems are in use for dealing with excrement. The duplicate pail system, with daylight removal (the pails being provided with air-tight lids), is carried out in Waratah, Wickham, Raymond Terrace, Wallsend, Plattsburg, Adamstown, and, until lately, in Hamilton. In Carrington and Stockton, pail systems, with tank carts, are in use. In Merewether, Lambton, New Lambton, there is no general system undertaken by the local authorities; householders themselves attend to the same. In East Maitland, West Maitland, and Morpeth, the methods in vogue are various—pails, middens, and cesspits are present. In Greta a pail system is being instituted. The frequency of removal of pails varies from a weekly interval in general use in Wickham to a three-weekly one in Adamstown. In Newcastle, however, where the conservancy system is partially present, in certain cases the pails are emptied at much longer intervals. In Newcastle sewage is run direct into the ocean or into the harbour. Excrement collected from pails is punted to sea; this method is also adopted by the Waratah and Stockton local authorities. In other places excrement is disposed of by burial in the earth. Garbage removal and disposal is undertaken by the local authorities with some degree of regularity, weekly or fortnightly, in some of the towns (Hamilton, Wickham, Plattsburg, Stockton, Waratah). In the central portion of Newcastle there is a daily removal, and in other parts the material is removed three times a week. In other towns householders are left to attend to it. The material is disposed of by being deposited on vacant areas about the municipalities, or is used for

levelling up low-lying lands. In the case of Newcastle garbage is punted to sea during summer months. In the winter time it is used for levelling up low-lying parts in the neighbourhood of the city.

The number of deaths from the following diseases, *viz.*, scarlet fever, typhoid, diphtheria, measles, whooping cough, influenza, diarrhoea, and dysentery during the year totalled 242, which gives a symotic death-rate of 8.6 per 1,000 for all the municipal areas taken together. The lowest rate is that of Morpeth, which is .8 per 1,000. The rate for the colony generally in 1897 was 1.08, and for Sydney and suburbs 1.04 per 1,000 of the population. The number of deaths from phthisis in the whole of the municipal areas was 46 during the year. This gives a death-rate of .69 per 1,000 of the population. The rate for Newcastle and suburbs was .67 per 1,000. The rate for the colony as a whole for the year 1897 was .73, and for Sydney and suburbs .97 per 1,000 of the population. There were notified during the year 445 cases of scarlet fever, 118 of diphtheria, and 273 of typhoid fever. The police districts of Maitland, Newcastle, and Raymond Terrace contributed 106 cases of scarlet fever, 34 of diphtheria, and 145 of typhoid fever.

The incidence of typhoid fever on the different districts is worthy of close attention. Not one town amongst those embraced within the Hunter River combined district shows a clean sheet so far as this disease is concerned, and I understand that previous years have not differed in this respect. Take the case of those towns which show the highest attack rates, *viz.*, Greta, with 20.8; West Wallsend, 36; Minmi, 10 per 1,000 of the population, and what do we find?—an entire absence of any proper system of dealing with the removal and disposal of excrement; cesspits are numerous, of poor construction, mere holes sunk in the ground without lining. Pails of sorts (kerosene tins, oil drums) are used in a number of cases. These receptacles, owing to their unsuitable size and want of attention in having them suitably placed in the closets, lead to considerable fouling of the ground in and around the privy. Where neither cesspits or pails are present it is the practice to allow faecal matter to fall on to the surface of the ground, where large heaps may be seen. Cesspits are emptied only at extremely long intervals, when the pits will hold no more; they may in fact be running over. Pail contents are buried in the yard areas. Where no receptacles are present in the closets, excrement is allowed to take care of itself. The excreta of infectious cases appear to be treated in the same manner as just stated. Slop waters are disposed of by scattering them on yard areas, or by running them into the roadside gutters, where they remain, forming stagnant pools. House refuse is allowed to lie about the yards, or is deposited on vacant ground adjoining the dwellings. At each of these places the water supply is not by any means of the best description; there being no public supply available (except in Minmi, where about one-fifth of the houses are furnished with the Hunter district water), rain water stored in tanks under or above ground has to be made use of. The underground tanks are, as a rule, poorly constructed—mere holes sunk in the ground without lining, provided with very imperfect covers, which are often below the level of the adjoining land. No care appears to be exercised to prevent the inflow of surface and subsoil waters. The following important improvements are needed at these places, and are recommended:—1. The institution of a uniform, cleanly, and satisfactory system for dealing with excrement; proper construction of closets, to prevent fouling of the

ground. 2. The provision of adequate and reliable water supply in place of undesirable underground sources. 3. Careful supervision over cases of the disease which crop up, in regard to thorough disinfection of all infectious matters (excremental and other); active inquiry into the conditions surrounding each case, with the object of rectifying insanitary states. In Newcastle there are water carriage and conservancy systems. Some 840 water-closets are connected with the sewers. There are good grounds for stating that the drains and fittings stand in need of great improvements. The pail system is very unsatisfactory and uncleanly owing to the want of uniformity of the pails and the irregularity of removal of their contents.

All the dairy premises situated within the municipal districts, and a number of those in the police districts, have been visited by me in company with the various sanitary inspectors. The object of these inspections has been to ascertain the sanitary condition of dairies from which the milk supply for the district is obtained. Reports were furnished to the various local authorities recommending improvements in regard to structural arrangements and other things. A number of these alterations have been carried out. There is still room for improvement in a number of cases. In regard to a certain proportion of dairy premises, it has struck me that sufficient care has not in all cases been exercised by local authorities in requiring, before registration is granted, the provision of necessary arrangements which are essential to the proper carrying on of a milk business. People seem to think that in order to sell milk, application only is required to ensure registration being granted; but premises should not be registered unless they are suitable in every way. This should apply to all alike. A dairyman who has only one or two cows will certainly not require as extensive arrangements as one who has forty, but the same quality should be obligatory as regards essential conditions indicated in the manual of instructions issued by the Department of Public Health for the guidance of local authorities, dairymen, and milk vendors. At my instigation, several of the local authorities have procured lactometers, in order to test samples of milk supplied in their district, but this method of procedure cannot take the place of chemical analysis. Local authorities should set about having samples of the milk supplied to the inhabitants of their districts periodically analysed by the public analyst, so as to bring to account those vendors who supply an adulterated article.

The practice of providing special pails for the reception of typhoid excreta should be carried out in all places where conservancy systems are in vogue. As soon as the local authority receives a notification of a case of typhoid a special pail, charged with a disinfectant, should be supplied to the house—and these pails should be supplied free of charge to householders. The pails should be removed and a clean one placed in its stead as frequently as practicable. If the contents of the pails are not burnt (which is the best treatment) they should be thoroughly disinfected at the depot by adding a sufficiency of disinfectant before being finally disposed of.

The Editor invites members of the Profession to forward to him terse notices of Medical Resignations, Vacancies and Appointments, Removals and other items of professional interest.

PUBLIC HEALTH.

At a meeting of the Sydney City Council on July 4th, it was decided, on the motion of Alderman Hughes, to invite tenders in America, England, and locally for the construction and erection of refuse destructors, the tenders to be divided into three heads, namely:—(1) The erection of a destructor; (2) the erection of a destructor and the working of same for a period of seven years, at a price per ton of refuse treated; (3) the erection of a destructor and the collection and destruction of garbage, for a period of seven years, at a price per ton of refuse treated. The tenders are to be received within four months. The report of the Finance Committee as to whether the Council could effect any financial saving by availing itself of the services of the metropolitan health officer recently appointed by the Government under the provisions of the Public Health Act, and whether such action would tend to improve the administrative control and efficiency of the health affairs of the city, was presented for adoption. It stated—“(1) That in the opinion of the committee, the City Council may now avail itself of the services of the metropolitan health officer without payment. (2) That under the provisions of section 51 of the Sydney Corporation Act it is imperative that the Council shall appoint its own health officer, whose duties are defined under section 163. (3) That the committee considers it undesirable to dispense with the services of the health officer so appointed. (4) That the Council, having the services of both officers at its disposal at all times, this committee does not recommend an alteration in the present arrangement.” Alderman Landers proposed the adoption of the report. Alderman Graham said the committee, in his opinion, had not taken the wisest course. The new Health Act gave the Council an opportunity of placing its health affairs on the level of those cities which adopted modern improvements. In his view, the committee had not realised this. The fact of saving a small sum like £250 was of trifling account. He regretted that the committee had taken a view of the matter which led to this report being sent to them for adoption. Alderman J. Harris wanted to know why their own officer should not be appointed. He had not an abundant faith in the Government in these matters. In 1881, when smallpox was introduced here, the Government officials took no action for three weeks. Alderman Graham divided the Council, but the vote was against him, the numbers being twelve to three. Aldermen Sir William Manning and Hughes being associated with Dr. Graham in the minority.

The Local Board of Health in Hobart is still urging the Government to establish an Isolation Hospital for Southern Tasmania.

It is interesting to note the age of the residents of the New Town (Tas.) Charitable Institution. There were three males and two females of 90 years and upwards, seventy-two males and nineteen females between 80 and 90 years, one hundred and nineteen males and fifty-seven females between 70 and 80, twenty-eight males and thirty-three females between 60 and 70 years, ten males and twelve females between 50 and 60 years, and twenty-one males and thirty-nine females under 50 years of age. The average age, exclusive of children, who died during the year was 72.26, the maximum being 96, and the minimum 27. Thirty-nine averaged over 80 years of age, and the average of the sixteen oldest was 80.50.

The Health and Sanitary Committee of the Hobart Board of Health recommended that Dr. Gregory Sprott, M.D., D.P.H., be appointed Health Officer

under the Health Act, under revised conditions, which had been submitted and approved by the committee and Dr. Sprott, at a salary of £150 per annum. The appointment to take effect from July 1st. Also that Mr. W. A. Brain be appointed Engineering Inspector and Assistant Officer of Health for the Health and Sanitary Department at a salary of £200 per annum. The appointment to take effect from July 1st. The report was adopted.

Dr. Sprott (Medical Officer of Health, Hobart) reports that during the month of May there were 53 deaths registered in the registration district of Hobart. There were 31 deaths—males, 18; females, 13—in the city proper, giving a death-rate of 12.24, as compared with 14.40 for the corresponding month of last year, per 1,000 per annum. The principal causes of death were:—Typhoid fever, 1; phthisis, 2; tuberculosis, 3; old age, 4; pneumonia, 3; pleurisy, 1; heart disease, 6; debility, 1; and the remainder were of a general nature.

From a return issued by the Health Department of New South Wales, it appears that during the first quarter of the present year the following notifications were received from medical practitioners:—Metropolitan District: Scarlet fever, 139; diphtheria, 68; typhoid fever, 831. Hunter River District: Scarlet fever, 59; diphtheria, 17; typhoid fever, 140. Remainder of Colony: Scarlet fever, 184; diphtheria, 126; typhoid fever, 713. We note that many municipal local authorities, in defiance of section 15 of the Public Health Act, have neglected to make any report for the quarter.

VITAL STATISTICS.

SYDNEY.—There were 1,021 births and 496 deaths registered in Sydney during May. The principal causes of death were:—Typhoid fever, 11; diphtheria, 1; enteritis, 27; pneumonia, 27; cancer, 88; phthisis, 42; bronchitis, 25; whooping cough, 8; diarrhoea, 12. There were 8 suicides.

MELBOURNE.—The chief causes of death in greater Melbourne during May were as follows:—Diphtheria, 7; cancer, 85; phthisis, 59; whooping cough, 3; bronchitis, 14; typhoid fever, 16; pneumonia, 36. There were 540 deaths registered during the month.

TASMANIA.—The Government Statistician's report on the vital statistics of the colony shows that during the month of May 120 births were registered in Hobart and Launceston. Deaths.—The deaths registered in May in Hobart and Launceston numbered 83. The deaths under 5 years of age numbered 28, or 33.73 per cent., of which 20 were under 1 year of age.

NEW ZEALAND.—During May the number of births and deaths respectively were in Auckland, 106, 74; Wellington, 105, 39; Christchurch, 77, 85; Dunedin, 99, 52. Total births, 387; total deaths, 200. In the four cities there were deaths from cancer, 19; phthisis, 12; diarrhoea, 12; typhoid fever, 9; old age, 9; pneumonia, 12; whooping cough, 9; diphtheria, 3; bronchitis, 11; enteritis, 5.

ADELAIDE.—The principal causes of death during April were:—Enteric fever, 3; cancer, 5; phthisis, 3; pneumonia, 2; enteritis, 5; diarrhoea, 7.

BALLARAT.—During May there were 7 deaths from typhoid fever, 4 from cancer, 5 from phthisis, 7 from pneumonia, 3 from enteritis.

BRISBANE.—The principal causes of death during May were: Diphtheria, 1; cancer, 7; phthisis, 6; convulsions, 6; endocarditis, 5; enteritis, 7; pneumonia, 6; Bright's disease, 5.

HOSPITAL INTELLIGENCE.

GENERAL HOSPITAL, HOBART.

THE annual report for the year 1898 of the Board of Management has been laid before Parliament. It sets forth that the resources of the institution were at one time taxed to its utmost. "To afford some idea of the pressure of work, it may be stated that at one time there were 154 patients under treatment, and of this number 124 were typhoid fever cases."

The total number of cases treated was 1,403, and the total expenditure £7,349 8s., being £666 18s. 9d. beyond the funds placed at the disposal of the board.

Of the 1,403 cases treated 116 proved fatal, 28 deaths occurring within 72 hours after admission. The average stay of patients in hospital was 25½ days, as against 24½ in 1897. There were 272 cases of typhoid fever, with 28 deaths. Owing to the excessive work thus entailed, the nursing staff had to be assisted by the importation of several nurses from Sydney.

The total number of beds occupied was 148; average number for the year, 97; and the average cost per bed was £60 12s. 10d.; and the average cost per patient, £4 4s. The total cost of stimulants and extras, which include champagne, wine, ice, brandy, whisky, ale, stout, and aerated water, was £188 12s. 9d., the cost of ice alone reaching an amount equal to £57 12s. 9d.

The report concludes by stating that certain repairs of a sanitary nature are now in progress, and when completed, "the hospital will be in a sound sanitary condition, and will compare most favourably with similar institutions."

GENERAL HOSPITAL, LAUNCESTON.

THE annual report of the working of this institution has just been published.

A considerable amount of improvements has been made. The new nurses' home was completed early in the year, at a cost of £1,062 8s. 11d., and the isolation wards for infectious diseases was opened on 22nd December. The total cost of these wards was £1,546 11s. 2d., £500 of which was contributed by the ladies of Launceston. The Board furnished the wards at a cost of £250 out of its private funds.

The bacteriological apparatus, purchased two years ago, is still lying idle for the want of a suitable building in which to erect it.

The total number of cases treated during the year was 965, and of these 91 died. The total number of beds was 142, and the average number occupied was 79, and the average stay of each patient in the hospital was 30 days. The total cost was £5,368 0s. 8d., average cost per bed occupied £66 13s. 8d.

The amount expended on stimulants, including aerated water, was £110 19s. 6d., of which £43 2s. 6d. was spent on brandy, and £35 11s. on aerated waters.

MELBOURNE HOSPITAL.

Dr. C. H. MOLLOY, owing to ill health, has resigned the office of Resident Medical Superintendent, after nine years' service.

MEDICAL NOTES.

THE following paragraph, headed "A Skilful Operation," appeared not long since in a New South Wales newspaper:—"On Thursday last Mr. A. R. came

into G—from U—suffering from a large tumor on the shoulder. Dr. L. K—examined the sufferer, and, as is usual with this able practitioner, at once decided to operate. Instead of using the dangerous anæsthetic chloroform he applied cocaine, and in a few minutes, assisted by the popular chemist, Mr. C. H—, skilfully removed the growth. Mr. R—states that the operation was entirely painless, and speaks in the highest terms of G—'s new medico."

Dr. E. W. WAY of Adelaide, S.A., left in the R.M.S. Oceana for a six months' trip to England and the continent of Europe in order to recruit his health, which has not been satisfactory lately. Mrs. Way will accompany him. We are sure that all our readers who know Dr. and Mrs. Way, and especially those visitors to Adelaide who have partaken of their genial hospitality, will join us in heartily wishing them *bon voyage*, and a complete restoration to health.

MILITARY INTELLIGENCE.

QUEENSLAND.—The following appointments, etc., are officially gazetted:—Joseph Espie Dods, M.B., to be a Captain in the Medical Staff of the Queensland Defence Force (Land). (This amends a *Gazette* notice published last month). John Alexander Cairns Penny, L.R.C.S.I., has resigned his appointment as Staff-Surgeon in the Queensland Defence Force (Marine), and has been appointed Lieutenant in the same force.

NEW ZEALAND.—His Excellency the Governor has been pleased to approve of the following appointment:—*New Zealand Volunteer Medical Staff*: George Hodges to be Surgeon-Captain.

NEW SOUTH WALES.—Captain Reuter E. Roth, Army Medical Corps, has been appointed Acting-Adjutant, New South Wales Army Medical Corps, from July 1st.

OBITUARY.

WILLIAM BARKER, M.B.C.S. Eng. 1840, of Albert Park, South Melbourne, died on June 8th. He was born in England in 1818, and arrived in Victoria in 1844.

JOHN ALFRED HENRY BUDGETT, L.S.A. Lond. 1875, who practised in Brisbane for fourteen years, died in Sydney on June 11th.

GEORGE ROBINSON ELLIOTT, M.B.C.S. Eng. 1843, formerly of Balmain, Sydney, died in London on June 15th. Dr. Elliott was registered in New South Wales fifty-five years ago.

WILLIAM KENNY, M.B., Ch. B. Melb. 1891, of Carlton, Melbourne, was found dead in Geelong, Vic., on June 26th. He had been in delicate health for some time. He was 28 years of age.

JOHN FRANCIS McALLISTER, M.B. 1885, Ch.B. 1886, M.D. Melb. 1892, died at Stanmore, Sydney, on June 24th. Dr. McAllister was born in Ballarat, Vic., thirty-five years ago, and after taking his degrees at the Melbourne University came to Sydney. He was formerly Resident Medical Officer at the Melbourne Hospital, Medical Superintendent at the Prince Alfred Hospital, Sydney, and Surgical Tutor at the Sydney University. At the time of his death he was Honorary Surgeon to the Prince Alfred Hospital. About twelve

months ago he became unwell, and he took a trip to Japan, which seemed to do him a deal of good; but not long after a relapse occurred, and he began to suffer from an affection of the throat. Encouraged by the effect of his previous voyage, he paid a second visit to Japan, returning home a couple of months ago. He was then in a very exhausted state of health, with all the indications of rapid consumption. He leaves a widow and one child. The remains were taken to Ballarat for interment.

BENTHAM PAYNTER MORISON, L.R.C.P. Edin., M.R.C.S. Eng., L.S.A. Lond. 1871, a well-known resident of Glenelg, S.A., died on June 6th. He had practised in South Australia for twenty-one years.

In our last issue it was mentioned that a further Obituary Notice of the late Dr. Clindenning would appear this month, but, unfortunately, the MS. has been mislaid.

MEDICO-LEGAL.

DR. ERNEST BLACK has been appointed to act as Coroner for the Perth and Fremantle Magisterial Districts during the absence of Dr. T. H. Lovegrove, on leave.

Dr. C. J. Kearney, of Grafton, N.S.W., has won an action for libel in the District Court against the proprietor of the South Grafton *Clarion*.

CHANGE OF ADDRESS, Etc.

ALLESTER, Dr. E. M., has removed from Traralgon to Walhalla, Vic.

ASTLES, Dr. H. E., late of Perth, has succeeded to the practice of Dr. Coxwell, in Brighton, Vic.

BARNES, Dr. E. H., formerly of the Sydney Hospital, has succeeded to Dr. Jackson's practice at Muswellbrook, N.S.W.

BUTTER, Dr. G., late of Oatlands, Tas., has removed to the Hospital, Zeehan, Tas.

DENTON, Dr. S. J., has removed from Coromandel to Waitekauri, N.Z.

EDMONDS, Dr. H. A., has succeeded to the practice of Dr. Salter, at Pittsworth, Q.

HUTCHENS, Dr. H. J., a new arrival, has succeeded to the practice of Dr. Sutton, at Beenleigh, Q.

OWENS, Dr. E. M., has removed from Richmond, Vic., to Burnie, Tas.

PATTERSON, Dr. J. H., has commenced practice at Traralgon, Vic.

PUGH, Dr. J. H., has removed from Wellington, N.Z., to Levuka, Fiji.

SPROTT, Dr. GREGORY, has commenced general practice in Hobart.

SUTTON, Dr. ALFRED, has removed from Beenleigh, Q., to Vulture Street, South Brisbane.

THOMAS, Dr. B., has removed from Melbourne to Hobart.

THORP, Dr. C. G., has removed from Clifton Hill, Vic., to Richmond, Tas., where he is taking charge of Dr. Allnutt's practice.

WALSH, Dr. A. C., late of Wyalong, N.S.W., has entered into partnership with Dr. Chenhall, of Marrickville, near Sydney.

WARD, Dr. J., has removed from Lumsden to Waikato, Otago, N.Z.

WILSON, Dr. T., late of Wagin, W.A., has removed to Katanning, W.A.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced :

Allester, E. M., M.B., &c., to be Public Vaccinator at Walhalla, Vic., *vice* Dr. L. W. Roberts, resigned.
 Altman, C. A., M.B., &c., to be Officer of Health for Bright Shire, Vic., *vice* Dr. C. M. Macquarie, resigned.
 Bell, R., M.D., Ch.D. Univ., Sienna, Italy, to be Medical Officer of the Hospital, Waigat, N.S.W.
 Butler, G., M.R.C.S. Eng., &c., has been appointed House Surgeon for Zeehan Hospital, Tas.
 Finlay, W. M.D., &c., to be Public Vaccinator at Richmond, Vic., *vice* Dr. C. E. Duigan, resigned.
 Gamble, M. F. H., L.R.C.P., &c., to be Acting Medical Superintendent of the Sunbury Lunatic Asylum, Vic., *vice* Dr. J. A. O'Brien, absent on leave.
 Graham, C. H., L.R.C.P., &c., to be Officer of Health for Tungamah Shire, Vic., *vice* A. F. Hepworth, resigned.
 Haydon, L. G., M.B., &c., to be Acting Officer of Health for Minnamite Shire, Vic., *vice* Dr. G. E. T. Haydon, absent on leave.
 Morris, Dr. B. H., late of Adelaide Hospital, has been appointed Medical Officer to the Destitute Poor and State Children Departments of South Australia, *vice* the late Dr. Clendenning.
 Muir, W. C. O., M.B., &c., to be Public Vaccinator at Albion, Vic.
 Park, J. S., L.R.C.P., &c., to be Officer of Health for Cranbourne Shire, Vic., *vice* Dr. M. B. Thomson, resigned.
 Patterson, J. H., M.B., &c., to be Officer of Health for Shire of Rosedale, Toongabbie Riding, and Shire of Traralgon, Vic., *vice* Dr. J. P. Montgomery, resigned.
 Peiper, F., M.D., &c., to be Officer of Health for Wodonga Shire, Vic., *vice* Dr. R. H. Schlank, resigned.
 Rommeis, E., M.D., &c., to be Health Officer of North Fremantle, W.A.
 Sprott Gregory, M.D., &c., to be Officer of Health for District of Beltana, Ta., also Police Surgeon for the Districts of Hobart, New Town, and Queenborough, Ta.
 Vance, W. B., M.B., &c., to be Acting Public Vaccinator at South Melbourne, *vice* Dr. W. C. Daleh, absent on leave.
 Ward, J., M.D. St. And., &c., to be a Public Vaccinator for Nokomal and Switzers District, N.Z.
 Wilson, T., M.B., &c., to be Resident Medical Officer of the Katanning District, and Public Vaccinator of the Urban, Sub-Urban, and Rural Districts of Katanning, W.A., *vice* Dr. Spencer, resigned.

MEDICAL RESIGNATIONS.

The following Medical Resignations are announced :

Duigan, C. B., L.R.C.S., as Public Vaccinator at Richmond, Vic.
 Haydon, G. E. T., L.S.A., &c., as Officer of Health for Shire of Minnamite, Vic.
 Hepworth, A. F., L.R.C.P., &c., as Officer of Health for Tungamah Shire, Vic.
 Macquarie, C. N., L.R.C.P., &c., as Officer of Health for Bright Shire, Vic.
 Molloy, O. H., M.D., &c., as Resident Medical Superintendent of the Melbourne Hospital.
 Montgomery, J. P., M.B., &c., as Officer of Health for Shire of Rosedale, Toongabbie Riding, and Shire of Traralgon, Vic.
 Roberts, L. W., M.R.C.S., &c., as Public Vaccinator at Walhalla, Vic.
 Schlank, R. H., M.D., &c., as Officer of Health for Wodonga Shire, Vic.
 Spencer, Dr., as Resident Medical Officer and Public Vaccinator of Katanning District, W.A.
 Thomson, M. B., M.B., &c., as Officer of Health for Cranbourne Shire, Vic.

REVIEWS.

THE DIET OF AUSTRALIAN SCHOOL CHILDREN AND TECHNICAL EDUCATION. By Philip E. Muskett, L.R.C.S. & R.C.P. Edin., late Surgeon to the Sydney Hospital. Sydney : George Robertson & Co.

Those of us who have had experience in the outpatient departments of Australian hospitals cannot fail to have noticed the totally erroneous ideas which most parents hold on the dietary of young children. Indigestion, diarrhoea, emaciation are usually the results of improper food. It is striking, the vast number of children

who quickly return to health when the diet is of the proper kind. For years this has been a growing evil in our great cities, and we fear the medical profession has not properly put the matter before the public. To remedy this serious defect Dr. Muskett has published this work, and we feel sure its study by parents must lead to a better understanding on the subject of dietetics.

Dr. Muskett considers that there can be no absolutely true race-type produced in Australia until the bulk of the population has acquiesced in the obligations imposed upon us by our semi-tropical climate.

The author deals fully with the importance of nourishment for growing children in order that their future health and strength may be ensured. He lays stress upon the value of a hot midday meal for school children, and in this we think he has brought forward a subject of vital importance. Children are too often allowed to go all day at school with only a piece of bread and butter or bread and jam at midday. A plate of soup or a cup of warm milk would enable the child to enter into its educational work with more vigour, while helping to build up a sound, healthy constitution for the future.

Chapters on Health and Disease during School Life form very interesting reading.

A large part of the volume is devoted to Technical Education, and in the concluding remarks Dr. Muskett draws attention to the great value of School Games and Gymnastic Exercises. "If Australia is to be inhabited by a healthy and vigorous people," he says, "there must be more attention paid to physical health. The continuity of a robust race can only be secured by the perpetuation of a sound stock."

A TEXT-BOOK OF OBSTETRICS. By Barton Cooke Hirst, M.D., Professor of Obstetrics in the University of Pennsylvania. With 653 illustrations. Philadelphia : W. B. Saunders. Sydney : L. Bruck, 1898. Price, 25s.

In the preface the author states that "This work is the result of a practice devoted for the past twelve years, exclusively to gynaecology in both its branches—obstetrics and gynecic surgery;" and we think it will be admitted by all who read and study the work, that the author has not failed to make good use of his opportunities.

The work consists of 846 pages, and is divided into seven parts—I. Pregnancy; II. The Physiology and Management of Labour and of the Puerperium; III. The Mechanism of Labour; IV. The Pathology of Labour; V. Pathology of the Puerperium; VI. Obstetric Operations; VII. The New-born Infant. There is also a good index. As might have been expected from the pen of one who was editor of the two volumes on Obstetrics in the American system of Gynaecology and Obstetrics, 1888, the work under review is one of the best books on Obstetrics that has been published. It is written in a lucid and concise manner, and gives evidence in almost every line that it is the work of a man who knows thoroughly what he is writing about. The illustrations are very numerous, and very clearly depict the conditions intended. The majority of them are original, either from photographs or drawings. Altogether we can confidently recommend this work as one worthy of a place in every consulting room. The publishers are to be highly complimented on the general get-up of the book.

THE THROAT AND NOSE AND THEIR DISEASES.

With 550 illustrations in colour, mostly designed and executed by the author, **LENNOX BROWN**, F.R.C.S.E., Senior Surgeon to the Central London Throat, Nose, and Ear Hospital, etc., p.p. 987. Fifth Edition revised and re-written. London: Ballière, Tindall & Cox, 1899; Sydney: L. Bruck, 15 Castlereagh Street.

The fifth edition of this already well-known treatise has been revised and re-written to such an extent as to render it practically a new work. The information on Anatomy, Physiology, Pathology and Bacteriology has been amplified and brought up to date, and a new feature added in Normal Histology. The sections relating to Diphtheria, Tonsillitis, Tuberculosis, Lupus, Leprosy, and Malignant Disease, and the chapter on Nervous Diseases of the Larynx have been re-written. Diseases of the Lingual Tonsil, of the Pharyngeal Tonsil, and of the Accessory Nasal Cavities have been accorded special chapters.

A new departure is marked by the author in obtaining special assistance in the departments of Anatomy, Histo-pathology, and Nervous Diseases. The Anatomical portion of the work is written by Mayo Collier, M.S., F.R.C.S., the chapter on Nervous Diseases of the Larynx by James Cagney, M.D., while Mr. Wyatt Wingrave is responsible for the Pathological and Histological sections. Of a work already so well known and favourably received little need be said except in praise of the alterations which have enhanced its already great merits.

Naturally, in a volume of some 967 pages, dealing with a special branch of surgery, much debatable material must be included both as regards fact and treatment. Thus 29 pages are devoted to Hypertrophy of the Lingual Tonsil and its symptoms through the existence of many of these symptoms is questioned by excellent observers. Again, many will doubt the possibility of, in all cases, satisfactorily and "effectually" removing adenoids and tonsils in the upright position under nitrous oxide in 40 to 50 seconds, while others may join issue regarding the use of chloroform in tracheotomy for diphtheria, and the condemnation of laryngeal forceps in removal of laryngeal growths.

It is disappointing to learn at page 512 that nasal stenosis is not a factor in the causation of phthisis after reading of the value of the "germicidal" action of nasal mucous in the section on bacteriology.

The illustrations are profuse and excellently executed, though some of those relating to pathology might have been omitted without impairing the practical utility of the work. The illustrative cases are well chosen, and the formulae for remedies add greatly to the value of an essentially practical and up-to-date work.

HUDSON'S "EUMENTHOL" JUJUBES (Registered), are a Gum Jujube containing the active constituents of well-known Antiseptics, Eucalyptol, Thymus Vulg., Pinus Sylvestris, Mentha Arv., with Benzo-Borate of Sodium and Bhatany, and exhibit the antiseptic properties in a fragrant and efficient form. Sold by all chemists, tins 1s. 6d., free samples to Physicians on receipt of card. G. Hudson, Chemist, Ipswich (Q.). Sydney Depot, 5 and 7 Queen's Place.

Several lengthy contributions are excluded from this issue for want of space.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

The following persons, having presented their diplomas have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Kearney, Gerald Aloysius, Lic. R. Coll. Phys. & Surg. Irel. 1897.
Ffrost, Albert Edward, M.B. Univ. Melb. 1897, B.S. Univ. Melb. 1898.

For Additional Registration.

Barnes, Edmund Horatio, M.Ch. Univ. Syd. 1897.
Willis, Charles Savill, M.Ch. Univ. Syd. 1899.
Brennand, Henry John Wolverton, M.Ch. Univ. Syd. 1899.
Cargill, William Duthie, M.Ch. Univ. Syd. 1899.
MacMaster, Donald Gneass Dunlop, M.Ch. Univ. Syd. 1899.
Howe, Neville Reginald, Fell. R. Coll. Surg. Eng. 1897.

QUEENSLAND.

Bell, Hugh Thomas Symes, Fell. R. Coll. Surg. Eng. 1898.

SOUTH AUSTRALIA.

Benham, Frederick Lucas, M.B. & B.S. Lond. 1878, M.D. Lond. 1881, M.B.C.S. Eng. 1877, L.R.C.P. Lond. 1882.

TASMANIA.

Owens, Edward Mathews, M.R.C.S. Eng. 1886, L.S.A. Lond. 1888, L.R.C.P. Lond. 1887, M.D. Brussels 1898.
Thorp, Charles Gabourel, M.B., C.M. Edin. 1884.
Thomas, Bernard, M.B., C.M. Edin. 1891.

VICTORIA.

McGivern, John Francis, L.R.C.P. & R.O.S. Edin. & L.F.P.S. Glas., 1898.
Carbonara, Michele, M.D. Naples 1891.

BIRTHS, MARRIAGES, AND DEATHS.**BIRTHS.**

DRAKE.—On the 14th June, at "Trevine," Harrington-street, Hobart, Tasmania, the wife of F. J. Drake, M.B., of a son.
PICKBURN.—On the 23rd June, at "Tulbourn," Strathfield, Sydney, the wife of Thomas Pickburn, M.D., of a daughter.
SHIRLOW.—On the 23rd May, at "Hexham," Darling-street, Balmain, Sydney, the wife of Dr. S. Stewart Shirlow, of a son.
VALLACK.—On the 9th May, at her residence, "Sylvia," Bowral, N.S.W., the wife of A. S. Vallack, M.B., Ch.M., of a son.

MARRIAGES.

FALKNER-WALSH.—On the 7th June, at St. John's Pro-Cathedral, Brisbane, by the Bishop of Brisbane, assisted by the Ven. Archdeacon David, Edgar A. Falkner, M.B., F.R.C.S., of Toowoomba, Q., to Hilda Dowling, youngest daughter of the late Hon. W. H. Walsh and Mrs. Walsh, of "Lachute," Brisbane.
READ-MCNALL.—On the 26th April, at St. Thomas' Church, North Sydney, by the Rev. C. J. Byng, assisted by the Rev. S. H. Childie, incumbent, Clarence, third son of Henry Barton Read, of Finsbury Square, London, and Shipbourne, Kent, to Ethel Maud, elder daughter of John McNall, St. Leonards, Sydney.

DEATHS.

BUDGETT.—On the 11th June, at the Prince Alfred Hospital Sydney, Dr. John A. H. Budgett, late of Brisbane, eldest son of the late Dr. Budgett, of Eastbourne, Sussex, England.
ELLIOTT.—On the 18th June, at Norwood, London, Dr. G. R. Elliott, late of Sydney.
MCALLISTER.—On the 24th June, John Francis, only son of Thomas and Mary Jane McAllister, of Ballara, and beloved husband of Florence McAllister, of Stanmore, aged 35 years.
SWINSON.—On the 16th June, at the residence of her son-in-law, Dr. George A. Marshall, 30 College-street, Sydney, Lucy Dorothy Swinson, of Bowral, wife of Dr. George Newton Swinson, M.R.C.S. Eng.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

NOTES OF A CASE OF SECONDARY POST-PARTUM HÆMORRHAGE—TRANSFUSION WITH SALINE SOLUTION—RECOVERY.

By H. SWIFT, M.D., ADELAIDE (S.A.).

On February 2, 1898, I attended Mrs. T—, multipara, in her confinement. She was a very excitable woman, and as I had had to give her ether in several previous labours she insisted on having it again. There was no difficulty, and except for the noise she made on recovering from the effects of the anæsthetic, the progress of events was satisfactory, and I paid my last visit as I expected on the 12th. On the evening of the 18th I received an urgent message to visit her. I found her in a great state of excitement, as she averred that she had been much alarmed by a man trying to get into the house. She had a sudden and rather profuse loss, and almost fainted. Prior to this date she had been doing very well. On examination the uterus was rather larger than it should be at this period of the puerperium. There was no pain or tenderness and hardly any discharge. The pulse was 120, and compressible. The rectum and bladder were not distended. I impressed upon those in charge the necessity for absolute rest in the horizontal position, the avoidance of any noise or excitement. Prescribed Dr. Barnes' mixture, and left, with the injunction that I was to be summoned at once if there was any recurrence of the hæmorrhage. At 6.30 a.m. I was sent for and found her collapsed, blanched, and almost pulseless, with all the accompanying signs of a profuse hæmorrhage. I administered some strychnine hypodermically, applied hot bottles, etc., and left to get assistance to transfuse. Dr. J. A. G. Hamilton kindly lent me his transfusion apparatus, and aided me in the operation. Without any difficulty we managed to inject into the median-cephalic vein about a quart of saline solution. Her pulse immediately improved, and in the evening she had rallied considerably. She had no return of the hæmorrhage, no fever and nothing to disturb an uninterrupted convalescence.

I have wished to put this case on record for two reasons. Firstly, because of the length of time, viz., 16 days that had elapsed since the birth of the child, when the hæmorrhage set in; and secondly, for the success following the

transfusion with a saline solution. It is evidently an example of "secondary post-partum hæmorrhage."

Dr. Playfair, who gives a very lucid description of this trouble, remarks:—"It is by no means rare, however, to meet with even profuse losses of blood coming on in the course of convalescence, at a time varying from a few hours or days up to several weeks after delivery. The causes may be either constitutional or local." And amongst the former he mentions mental emotions. I attribute the hæmorrhage in this case to be due to the disturbance in the nervous and vascular systems caused by the fright.

EYE SYMPTOMS IN SOME GENERAL DISEASES.

By S. H. HUGHES, F.R.C.S., HON. ASSISTANT OPHTHALMIC SURGEON, PRINCE ALFRED HOSPITAL, SYDNEY.

READ AT THE GENERAL MEETING OF THE NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION ON JUNE 30TH, 1899.

THE two cases which I am showing serve as excellent examples to illustrate the paper which I am about to read.

J. C., coal miner, *æt.* 30, came to the Prince Alfred Hospital complaining of failing sight, which he said had got much worse during the last three or four months. He never had had good sight, was always short-sighted, and had worn glasses, but he could not now see with them. Two years ago he was in the Sydney Hospital, with paralysis of the left eye. One year ago he contracted syphilis.

On examination—

R. V. $\frac{3}{60}^c - 0.5D.$ sph. $\frac{6}{60}^c - 3D.$ cylind axis $180^\circ = \frac{6}{60}.$

L. V. counts fingers badly at 8 inches, not improved.

The pupils were unequal, the right measuring 3.5 m.m. in diameter, and the left 3 m.m. The right pupil behaved badly to light, but contracted well to accommodation, and the consensual reflex was present, though far from good. The left pupil does not respond to the light reflex, but reacts to accommodation. The consensual light reflex was absent.

The ophthalmoscopic examination of the fundi showed large posterior staphylomata, the discs in an advanced stage of grey atrophy, with slight cupping, and the retinal vessels very small.

The examination of the visual fields gave the following results :—

Right Eye

Fig. 1.

The above was taken with a white square, 9 m.m. in diameter, and in a good morning light. It shows the right field to be concentrically contracted, especially above and to the outer side.

Left Eye

Fig. 2.

The field of the left was taken with the same-sized square and under the same conditions. It shows the central vision to be entirely gone, and only a small portion of the peripheral field intact.

In the left eye the perception for colours was entirely absent, but in the right eye, though present, were much contracted for red and green. That for red showed a large scotoma in the upper field.

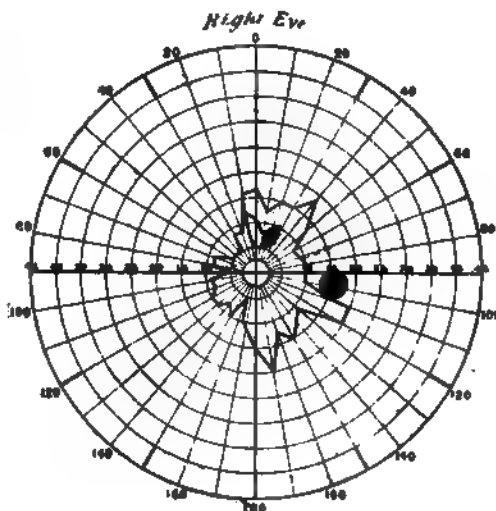


Fig. 3.

The above was taken in a morning light with a 5 m.m. red disc. The gap in the upper part of the field represents the situation and extent of a scotoma.

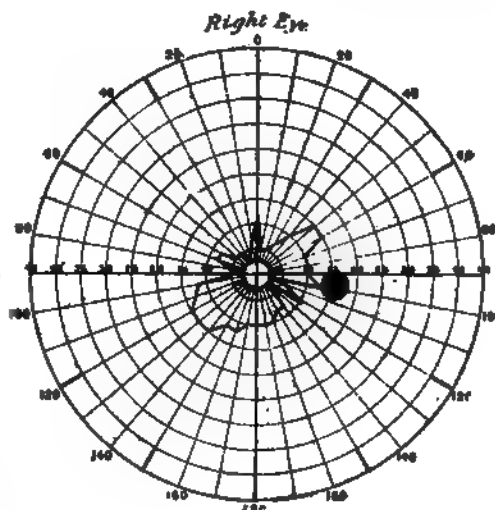


Fig. 4.

The field for green was made under similar circumstances as that for red. There is no

scotoma, but the entering angles are large, and in some cases almost embrace the point of fixation.

The patient was sent over to the medical side, where Dr. A. E. Mills kindly made the following notes of the case:—Has had sharp shooting pains in legs occasionally, but only momentary in duration; the knee jerks quite absent; plantar reflex absent; cremasteric and epigastric reflexes present; no gastric crises; walking gait not characteristic; no numbness or loss of sensation in feet; can stand with eye shut perfectly; grasp of hands poor, the left seeming a little the stronger; sexual power much less than formerly, and desire to pass water with bladder full very slight compared to what it was. Suffers from constipation. Urine, acid; sp. gr., 1.020; no albumen and no sugar.

In August, 1897, he was in the Sydney Hospital, under the care of Dr. Jenkins, for paralysis of the left third nerve. The notes, for which I am indebted to the kindness of Dr. McClelland, the medical superintendent, say he first noticed dimness of vision in the left eye and then diplopia; later on lachrymation and epiphora. He had headache and giddiness and vomited. Previous to this he has had several attacks of a similar nature, the first three or four months ago. Has not had syphilis; seven years ago had rheumatism; has had shooting pains in legs at times, the last attack four days ago.

Present condition.—Knee jerks present, the right if anything being slightly better than the left; has ptosis of left eye but can raise lid with an effort, also paralysis of internal, superior and inferior recti. Pupils: Left, fixed or nearly so; right, active. Has granular lids. Dr. Gordon MacLeod, who saw the patient at this time, made a note to the following effect:—“Paralysis typical except that pupil not dilated. Reaction of pupil to light and accommodation not quite abolished but sluggish. Fundus: No optic neuritis or any trouble pointing to cerebral disease, only posterior staphyloma natural to his myopia.”

The other case is that of George C., *æt.* 59, fireman. He came to the Prince Alfred Hospital complaining of dimness of sight in the right eye, which had been gradually getting worse for the past two years.

On examination the following condition was found:—

R. V. counts fingers at 12 inches badly.

L. V. $\frac{1}{2}$ (iii. letters) HM. 1D. cylinder axis $180^\circ = \frac{1}{2}$ (iii. letters).

Pupils behave badly to light, especially the right; reaction to accommodation and consensual reflex present. Cutaneous pupil reflex not ascertained; cornea nebulous; no scotoma for red. By ophthalmoscopic examination it was found that there were large crescents on the outer side of the discs, which were in a fairly advanced stage of grey atrophy, the lamina cribrosa being well seen.

Under homatropine and cocaine the mydriasis was not complete.

The examination of his visual fields showed them to be much contracted, that for white being most marked on the upper and nasal sides, where there were large entering angles almost embracing the point of fixation. All the fields were worked out with a 5 m.m. disc in a good morning light. There were no colour scotomata.

Left Eye.

Fig. 5.

The field for white shows concentric contraction most marked on outer and upper and nasal sides, with large entering angles almost embracing point of fixation.

The following fields (Figs. 6 and 7) for red and green showed marked contraction, but no scotomata. That for green has a large entering angle below.

Dr. A. E. Mills, who saw the patient, made the following notes:—Patella reflex good, and stands well with eyes shut. Slight tremor of hands not increased on movement; no intention tremor.

The diagnosis in these two cases clearly lies between *tabes dorsalis*, disseminated sclerosis, and multiple neuritis.

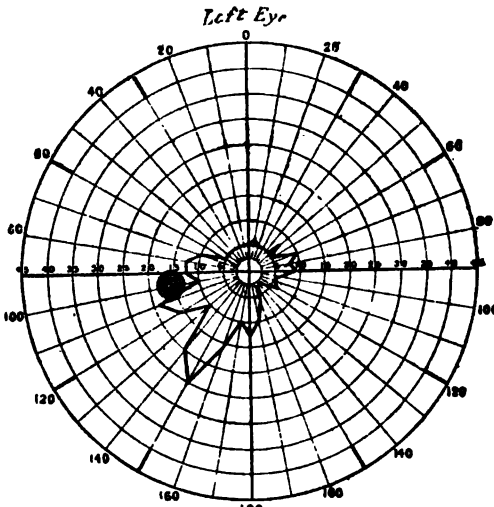


Fig. 6.

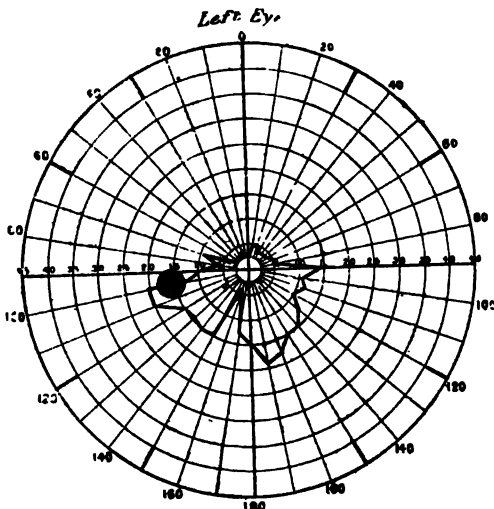


Fig. 7.

In *tabes* the eye symptoms are most important, and even clinch the diagnosis in some cases. It occasionally happens that they are the only manifestations of the disease, the principal of which are—optic atrophy, often called grey atrophy; muscular, vaso-motor and secretory disorders.

In optic atrophy associated with *tabes* the disc has a grey appearance, and is slightly ex-

cavated. The change begins on the outer side of the disc, and extends inwards, finally involving the whole disc. The lamina cribrosa is well marked, and this is in contrast to the atrophy following post-papillitic neuritis. If the atrophy is associated with great physiological excavation it may be mistaken for glaucomatous cupping, and this is especially liable to occur in myopia, where large crescents and atrophy of choroid may simulate glaucomatous halo. The vessels are not affected in calibre as a rule, as the original process is behind the entrance of the vessels. All inflammatory phenomena are absent, both ophthalmoscopically and anatomically. It is a primary atrophy, perhaps following granular degeneration. The finer connective tissue bands atrophy, and later the coarser septa retract and become more homogeneous and sclerosed; the walls of the smaller blood vessels also share in the sclerosis. Signs of interstitial processes and nuclear proliferation are never present. The subsequent thinning of the nerve is never so great as in retro-bulbar neuritis. Everything points to its being a simple atrophy, and generally of the descending variety. The retina sometimes shares in the atrophy, which is confined to the nerve fibre and ganglion cell layers.

The visual disorders consist in a diminution of central vision, with concentric contraction of field and disorder of colour sense. The central vision bears a definite relation to the narrowing of field—the larger the field the better the central vision. The visual impairment is slow, and years may elapse before complete blindness supervenes; the time varies from ten to twenty years.

Temporary or permanent improvement may occur, especially at the beginning of the disease, but as a rule it is progressive. The most rapid cases take a year, but Hirschberg reported a case which took only eight weeks. It is often found that in feeble illumination or artificial light the vision is disproportionately poorer, although no anomaly of light sense can be discovered.

With the field the contraction is generally concentric to the blind spot, not the yellow spot, and often with entering angles which approach and envelop the point of fixation. The point of fixation is not usually preserved until the last, an excentric part of the retina, is at the end still sensitive to light. This is well shown in Figure 2. Central scotomata hardly ever occur, and they always raise the suspicion of a complication or false diagnosis. Gowers reports a case of sclerosis of posterior and lateral columns of the cord,

with grey atrophy of discs and bilateral oval central scotomata for red and green. This is typical of pseudo-tabes (multiple neuritis) and not tabes. Where the colour boundaries are much narrowed and out of proportion to white the cases are generally rapid; but, on the other hand, where the narrowing for colour is proportionate to the white the cases are either very slowly progressive or stationary. The colour disturbance is characteristic of interference with conduction. It sometimes happens where colours cannot be recognised in a weak light they are easily distinguished in a strong one.

As a rule, there is a disproportion in both directions between visible atrophy and disturbance of vision. Generally the atrophic discolouration is noticed before any disturbance of vision is demonstrable. Where the atrophy appears to be greater than one would think from an examination of the vision, the case is usually slowly progressive or stationary and *vice versa*. Occasionally one sees total grey atrophy of the disc without any visual disturbance.

The atrophy may begin at any stage of the disease, and even precede the first symptoms for years. Charcot observed the atrophy 10 years before any other symptom, and Gowers as much as 16 years. The older the individual the slower the course of the disease. It has been said that when blindness occurs at an early period, and especially when it runs a rapid course, a slow course of tabes may be expected.

According to Knies, Benedict is made to say: "It is a rule without exception, as far as his experience goes, that motor tabetic symptoms subside however severe so soon as atrophy begins. The latter is a most unfavourable symptom."

A rapid course of visual disturbance always raises in Knies the suspicion of a wrong diagnosis, as this is more common in neuritic and sclerotic processes. Usually both nerves are affected, but at different times. The frequency of atrophy in tabes has been variously estimated. Gowers found it in 13.5 per cent., Berger in 33.7 per cent., and Uhthoff in 20 per cent. With ophthalmologists it is higher. Charcot believed that all cases of so-called simple atrophy eventually presented spinal symptoms, but Gowers thinks this percentage too high, and that about only one half of them develop tabetic symptoms. At all events, grey atrophy raises the suspicion of tabes, although 10 to 30 years may elapse before other symptoms.

Other visual disorders are rare, but do sometimes occur in the later stages. They consist

of homonymous hemianopsia and central scotoma. Berger is of the opinion that they occur frequently. The homonymous defects are probably due to foci of degeneration in the tractus opticus or the primary ganglia.

The muscular disorders are of all kinds, and occur frequently in tabes. Berger found them in 38 per cent., Dillman in 41 per cent., and Uhthoff in 20 per cent. of all cases. The most common are paralysis of the sixth and third nerves, the latter being partial or complete. The paralyses of the external ocular muscles are often bilateral, but are not symmetrical; more often they are only unilateral, and affect single muscles. As a rule they develop suddenly, and usually disappear after a longer or a shorter period with or without treatment, lasting in some cases only a few hours, whilst in others a year or more.

Hutchinson says:—"Spontaneous recovery of a ptosis awakens a suspicion of tabes."

The differential diagnosis between paralysis due to syphilis and to tabes dorsalis is most important, and is occasionally extremely difficult. They are here tabulated for simplicity:—

DIFFERENTIAL DIAGNOSIS OF TABETIC AND SYPHILITIC PARALYSES.

IN TABETIC PARALYSES.

IN SYPHILITIC PARALYSES.

- | | |
|---|---------------------------------------|
| 1. Only one or two muscles as a rule involved. | 1. Usually many muscles are affected. |
| 2. There are no headaches, vertigo, epileptiform attacks, aphasia, or mental disorders. | 2. All these are more or less common. |
| 3. The accommodation remains intact for a long period. | 3. The accommodation suffers early. |
| 4. Paralyses often temporary, only lasting few hours in some cases. | 4. More permanent. |
| 5. They develop rapidly. | 5. Develop more slowly. |
| 6. Relapses are common. | 6. Relapses are rare. |

There are frequent exceptions to all these examples.

The rarer symptoms are complicated ophthalmoplegia, both interna and externa and bilateral ptosis.

"An unilateral paralysis of accommodation without mydriasis is often the first sign of tabes, and is associated in a characteristic manner with patches of anæsthesia of the skin in temporal region. (Galezowski)."

Nystagmus is rare, but it has been observed. The rarer forms are probably due to complications, such as insular sclerosis or general paralysis, which are often observed.

Muscular paralyses are more common in tabetics who have had syphilis, whilst spinal symptoms predominate in the others.

The paralyzes in tabes are more often complete and permanent than in disseminated sclerosis.

Paralysis of associated movements occur rarely and usually at a late period. The early paralyzes usually recover, the later ones persist.

Knies says: "Every paralysis of an ocular muscle which occurs suddenly in a healthy person without injury—apoplexy or other brain symptom, diabetes, syphilis or albuminuria—arouses suspicion of beginning tabes, especially if it recovers in a comparatively short time or subsequently relapses."

The pupillary symptoms are very frequent, and are of great diagnostic importance. They consist in myosis and mydriasis, the former being the most common. The reaction to light may be retained or absent, but it is always very much diminished. The myosis may also be associated with ptosis sympathetica owing to paralysis of the instriped muscular fibres in the upper lid.

Dillman found Argyll Robertson pupil in 76 per cent., and in 25 per cent. rigidity to light occurred early or perhaps as the very first symptom. Dilatation of pupil to cutaneous irritation seems to disappear later than reaction to light. If myosis marked reaction to cutaneous irritation is absent.

Berger found only four cases in 109 with normal pupil. In some cases the pupil reacted by oscillating movements—so-called hippus. This must be looked upon as the very beginning of paralysis. It is known as Gowers' sign.

In spinal myosis the action of mydriatics is diminished, whilst in mydriasis that of myotics. Loss of light reflex, which is followed by loss of accommodation and convergence, and cutaneous pupillary reflex is one of the most characteristic signs of impending tabes, but these symptoms occur in other diseases, such as general paralysis; but here we have the mental condition to aid us, and also the characteristic disorder of speech.

Inequality and irregularity of pupils with or without reflex are common. Occasionally one sees so-called paradoxical reaction of pupils, i.e., dilates to light and contracts on its removal.

Epiphora is a very frequent sympathetic symptom. Berger found it in 50 per cent. It is generally a direct disorder of secretion, but it may be due to imperfect action of orbicularis. Exophthalmos has been observed. Insensibility of cornea very rare.

As a rule, in tabes the tottering increases on closing the eyes, and this is accounted for by the removal of voluntary impulses through the sense of sight. "The imperfect innervation of

the motor organs on account of the defective conduction of peripheral sensory stimuli may be replaced entirely or in parts by voluntary impulses under the control of the sense of sight. But if the cause of the ataxic symptoms is central (medulla or cerebellum) or is situated on the motor side of the first reflex arc, it will not be affected by voluntary motor impulses and the ataxia will not increase on closing the eyes." (Knies.)

Symptoms of tabes may occur in cerebellar diseases, hæmorrhages into pons, and in chronic systemic or focal diseases of the cord, but particularly in multiple neuritis of posterior nerve roots. In such cases the eye symptoms may decide the diagnosis.

Multiple neuritis, which is an acute interstitial inflammation of the nerves, giving rise to secondary degeneration and atrophy, sometimes simulates tabes. This is especially liable to occur when the posterior nerve roots are affected, and particularly if the inflammation is ascending in character. It is, however, as a general rule, more rapid than tabes. If it begins acutely with fever and pain which end in anaesthesia, the mistake is hardly possible. It is in the doubtful and chronic cases where the eye symptoms come to our aid, and enable us to distinguish multiple neuritis from tabes. Any eye symptoms which may be present depend mainly on an axial neuritis of the optic nerve, and consist of central scotoma with colour disturbance, which is so characteristic of toxic amblyopia. This does not occur in tabes, or at least very rarely so. Other forms of visual disturbance are rare. The ophthalmoscope also shows the findings which are characteristic of toxic amblyopia, viz.:—greyish red opacity and obliteration of the nasal half of the disc, with atrophic discolouration of the temporal half, where the fibres to the macula lutea are situated. The absence of myosis and reflex rigidity of pupil is also characteristic of multiple neuritis. Paralysis of ocular muscles may be present if nerves at base of brain are affected. Nystagmus is rare.

Oculo pupillary symptoms also occur in paralysis of the arm, if the nerve roots of the spinal cord have been implicated. The oculo pupillary fibres from the cord to the sympathetic pass through the seventh and eighth cervical and first dorsal nerve roots. If these become impermeable, we may have ptosis, myosis, and exophthalmos, either separately or in combination. If they are the site of spasm, or neuralgia, spastic mydriasis is often noticed with or without dilatation of palpebral fissure and enophthalmos.

In disseminated sclerosis affections of the eye are also common, and the symptoms may be characteristic of the disease. The most important eye symptoms are nystagmus and nystagmus-like twitchings (due, it is said, to insufficient cortical innervation of the oculo-motor nuclei) oculo-motor paralyses, and visual disorders.

The nystagmus is probably due in the main to peri nuclear foci in the fibres of the coronal radiator.

Uthoff states that typical nystagmus occurs in 12 per cent. of all cases, whilst 46 per cent. have nystagmus-like twitchings, *i.e.*, twitching movements of eyes towards the desired position either during movements in all or only certain directions. True nystagmus is extremely rare in other brain diseases, although it does occur, but not nearly so frequently as in disseminated sclerosis.

Oculo-motor paralyses may occur with or without nystagmus. Both oculo-motor nerves may be affected, as also the sixth, either unilateral or bilateral. Sclerotic patches have been found in the nerve trunks. Paralysis of convergence occasionally occurs. A less degree of paralysis is far less common than complete paralysis. The paralyses almost always recover, but relapses may occur. They are commoner later than early in the disease. The changes in the pupils are rare, but myosis and inequality have been seen. The majority of them, however, are only slight. Increased excitability has been noticed. Thus the pupils show no characteristic changes as in progressive paralysis.

The most important visual disorders consist in scotoma for colours and irregular narrowing of field, with or without disturbance of central vision. Both or only one eye may be affected. It often develops very rapidly, and may undergo improvement and even disappear entirely. Patients usually complain of a mist before the eyes, but seldom of subjective visual sensations. Gunn, however, in the Ophthalmological Societies' report for 1897 mentions a case where a patient noticed the subjective sensation of colour described as violet or reddish pink. The impairment of sight may appear early, and be the sole manifestation for some time. Scotomata are rarely absolute, and complete blindness is very rare.

All these visual symptoms point to a retro-bulbar neuritis, and changes have been found in the nerve supporting this—such as granular degeneration of the medullary sheaths—the axis cylinders remaining intact; proliferation of the interfibrillary connective tissue and nuclei. The small blood vessels are found dilated and increased in numbers. The process begins in the

finer connective tissue septa. An ascending or descending degeneration is rare. No change has been found in the retina except in a few cases. It is unusual to find the atrophy of the nerve complete in these cases, being more often partial or incomplete. The foci of disease are more common in the optic nerve than in the tractus opticus.

The ophthalmoscopic appearances resemble those of tobacco and other toxic amblyopias. The disc on the nasal side has a greyish-red appearance, and is cloudy and often obliterated, whilst the temporal half is pale, and very much resembles dull porcelain. In about 6 per cent. of the cases optic neuritis is found, but, on the other hand, 4 per cent. present quite normal fundi. It is usual to find a great disproportion between the ophthalmoscopic appearances and the visual disturbance, the latter being much more effected than we would be led to imagine from the changes in the disc. With tabes it is the reverse. The defect of vision in disseminated sclerosis may be very considerable when the fundus is normal.

Sometimes the central loss is accompanied by a concentric contraction, but this is uncommon. Vision varies from actual blindness for a time to mere dimness, and is worse in a bright light. A bright light soon leads to further degeneration in vision, and it is much the best on getting up in the morning. Patients occasionally complain that the objects move, and are seen through a haze. The movement, it has been suggested, is due to the imperfect insulation of the axis cylinders.

In the Ophthalmological Society of the United Kingdom's report for 1897 Dr. Buzzard says:—"In general terms it comes to this, that in something like 50 per cent. of cases of disseminated sclerosis, we may expect to find pallor of discs either on one or both sides, or, in the absence of this, we shall hear that the patient, on one or more occasions, has suffered from some amount of amblyopia, for a period varying in duration from a few days to weeks or months. Vertigo and diplopia figure frequently in the disease."

As to the diagnosis, in the case of J. C. Miner, it lies between tabes dorsalis and disseminated sclerosis. This history of his having had ptosis with external strabismus, etc., in 1897, and of which he has quite recovered; the loss of the knee jerks; the presence of the grey atrophy with peripheral contraction of the field of vision; the condition of the pupils and the loss of sexual and bladder power all point to its being a case of tabes. On the other hand, the paracentral scotoma and the absence of ataxia seem to favour disseminated sclerosis at

first sight. Scotoma for red, though uncommon in tabes, is occasionally seen, some authorities looking upon it as common. Again the ataxia is not an invariable accompaniment of tabes. To what is its absence due to in this particular case—to Benedict's law or to the changes being central (medulla or cerebellum)? There is no evidence of his ever having had any difficulty in walking, so that this is quite sufficient to exclude Benedict's law. The same arguments hold good in the case of multiple neuritis. It is an interesting fact that whereas his symptoms extend over two years he gives a history of having had syphilis only a year ago.

CASE II. we must also look upon as tabetic, but in an early stage. The condition of the pupils, the grey atrophy, with contraction of visual fields, stamp it as a case of tabes dorsalis. There are no scotomata for colours. The relation of the visual degeneration and the amount of atrophy are well exemplified in this case, for whereas the atrophy appears of equal intensity on both sides, yet central vision is almost entirely lost on one side, whilst remaining comparatively good in the other.

SALINE INJECTIONS IN THE TREATMENT OF PUERPERAL SHOCK.

By A. E. WIGG, M.D. (BRUX), ADELAIDE, S.A., HON VISITING MEDICAL OFFICER TO THE ADELAIDE CHILDREN'S HOSPITAL.

THE injection of saline fluid is by no means a new method in the treatment of shock, but it is one the value of which in puerperal cases is not so generally recognised as it should be. All who are engaged in midwifery practice will at some time or other have had to deal with shock after labour, resulting from prolonged labour, hæmorrhage, or both causes combined. The usual treatment is alcoholic stimulation, the administration of strychnine, ether, ammonia, etc.; but in spite of these the shock may continue, and the patient succumb. A remedy, therefore, which is more powerful in its effect, and more successful in its application than any of those in common use, will be gladly welcomed by those who have experienced the anxiety of a puerperal case accompanied by an alarming degree of shock. Now in the use of saline injections we have a remedy which I believe to be far superior to any other, and one which can be easily and safely used.

Two cases in my practice will illustrate its value. I need only give them in outline. The

first was a multipara, who had been losing blood for two days before sending for assistance. The condition was one of placenta prævia, head presenting. When the os was sufficiently dilated, I endeavoured to deliver by forceps without an anæsthetic, but failing in this I turned and delivered without difficulty. There was no unusual amount of hæmorrhage after delivery, but the patient was extremely collapsed, semi-conscious, with sighing respiration and imperceptible pulse. Before removing placenta I gave ergot by the mouth and strychnine subcutaneously, and after a reasonable interval expressed the placenta. Brandy was administered and vomited, ammonia applied to nostrils, frictions and warmth to the surface, but still the condition of shock continued. A second injection of strychnine was given, and after about an hour the pulse could be just felt. I hurried home to procure the necessary appliances for intravenous injection, and assistance in the operation, and on my return found the patient in the same state. Failing to obtain assistance, I determined to use the saline fluid subcutaneously, and injected one and a half pints into the tissues of the back, and the same quantity into the rectum. Almost immediately the pulse and general condition improved, and in an hour the patient was comfortable, with a good pulse of 110. She had a slight elevation of temperature for a few days, but eventually made a good recovery.

The second patient was a primipara. She arrived from the country a fortnight before her confinement, and was in a most pitiable condition. There was enormous œdema of the whole body, the urine was loaded with albumen, vomiting was so frequent that she was almost starved, and she was unable to sleep owing to abdominal pain and inability to lie down. This condition was unrelieved by any of the modes of treatment tried. When labour commenced, it was impossible to diagnose the presentation, but later on a foot presented, and under chloroform, administered by a colleague (I think now that ether would have been preferable), delivery was effected. The loss of blood was very small, but the patient was extremely collapsed. I gave a full hypodermic injection of strychnine, but, failing to get reaction soon and remembering my other case, I lost no time in administering a rectal and subcutaneous injection of saline fluid, with almost immediate benefit. The patient made a good recovery, though weak from her previous condition. I very much doubt

whether either of these cases would have recovered without the use of saline injections.

As the saving of time was of the utmost importance, the form of saline solution which I used was one teaspoonful of table salt to a pint of boiled water at the temperature of 100, to 105°. This proportion is one that is easily remembered, and is sufficient for most purposes. A trochar with rubber tubing was connected with a douche can, and the fluid was injected from a height of about four feet. In the first case the fluid was injected below the scapula, and in the other below the breast, but in both cases it produced slight pain at the time and considerable tenderness for a few days afterwards; I should therefore advise the insertion of the trochar in front, so as not to render the dorsal position of the patient uncomfortable. When about one and a half pints had been injected, the patient began to complain of the pain, and I then removed the trochar, keeping the finger pressed on the puncture to prevent escape of fluid. Another pint or more injected into the bowel is, I think, advisable, though if the degree of shock be very profound the fluid may not be retained; still it is well to use it.

Saline fluids may be introduced under the skin (hypodermoclysis) or into the veins (venous infusion), or into the peritoneal cavity, or into the rectum; but the subcutaneous infusion is the usual and most convenient method, and it is reasonably prompt. Venous infusion may be resorted to when a very rapid effect is required, and when the necessary appliances and assistance are at hand. I am so convinced of the value of saline injections in the treatment of puerperal shock that I recommend those who are doing obstetric work to add to the contents of their midwifery bag a trochar and four feet of tubing; they are as important as ergot and strychnine. A douche can is now-a-days obtainable in many houses, and, if not, a funnel may be attached to the tubing and used in an emergency. Of course, whatever apparatus is used should be above suspicion as to cleanliness, and sterilised if possible. In advocating the use of saline solutions, I do not wish the value of strychnine to be ignored, and in any case I should first use strychnine, as it can be done at once and whilst the saline solution is being prepared. A recent American authority says: "Whatever influence strychnine may exercise upon the circulation is in reality due to its effect upon the nervous system, as it is not a direct cardiac stimulant of any considerable power." This may explain the reason why I failed to get much improvement by strychnine; possibly the saline fluid

acts as a direct cardiac stimulant. In addition to its stimulating effect, the value of saline injections is shown in other ways; vomiting is checked, thirst is relieved, and a very marked diuretic effect is produced.

I must plead ignorance as to theories of the mode of action of saline injections in removing shock, and I will not presume to advance one of my own. In those cases where the shock follows severe hæmorrhage, we can understand that the restoration of an equal bulk of fluid to the circulation may have a stimulating effect; but in other cases, of which my second is an instance, where there has been but slight loss of blood, quite insufficient to account for the intensity of the shock, it is difficult to understand how so alarming a condition is removed by the introduction of a small quantity of fluid into the circulation. After severe abdominal operations, it is a well-known fact, first demonstrated, I believe, by the late Mr. Lawson Tait, that flushing the peritoneal cavity with warm saline fluid has almost immediately a stimulating effect upon the pulse, before it is possible for the fluid to be absorbed into the circulation.

As a supplement, I will shortly enumerate some other conditions in which saline fluids have been used with advantage:—Shock produced by accident, or following severe operations; after hæmorrhage from typhoid, gastric ulcer, or hæmoptysis; in the collapse of cholera; in the coma of diabetes; and in puerperal fever and puerperal convulsions, where it may act beneficially by its diuretic effect. In most of these conditions, the saving of time being of less moment, greater care may be taken in the preparation of the fluid, and a solution more nearly approaching the normal saline constituents of serum may be used. The water should be filtered and boiled, and to each litre add calcium chloride 0.25 gramme, potassium chloride 0.1 gramme, and sodium chloride 9.0 grammes.

I hope that others who may have to contend with so alarming a condition as puerperal shock may be induced to adopt the use of saline injections, as I believe it to be by far the most valuable method of treatment at present known.

CAUTION TO THE MEDICAL PROFESSION IN AUSTRALASIA.—We have received the following telegram from a leading medical practitioner in Western Australia: "Warn through *Gazette* all medical men answering delusive advertisements passed by local committees managing goldfield hospitals."

NOTES ON SOME EXPERIMENTS ON THE CURE OF ANTHRAX.

By J. MCGARVIE SMITH AND J. A. GUNN, SYDNEY.

THE following are some brief notes summarising experiments on the cure of anthrax by means of serum from immune sheep, proving its curative properties to be greater (as far as we know) than has heretofore been accredited to it by other observers. Our experience proves that sheep can be cured eight hours after the injection of a dose of virulent anthrax sufficient under ordinary circumstances to kill the animal within thirty hours.

It follows that if one of the most susceptible animals to this disease can be so successfully treated, then we have every reason to believe that such treatment, if freely used in cases of anthrax in man, would be equally successful when used around the seat of infection in *wound anthrax* (the most common form here), while in cases of *general anthrax* or in *wool-sorters'* disease the injection of excessive quantities would materially increase the chances of recovery of the patient. But as man is naturally more immune than sheep and as in a large majority of the cases of wound anthrax the disease remains localised for a considerable period relatively speaking, it may be found that a moderate dose injected around the seat of infection would be sufficient, but should a larger dose be required it could undoubtedly be used with impunity.

We will not occupy your space by detailing our work on this disease, work undertaken in the hope of finding a cure more certain and safe than what we must consider, notwithstanding the successes achieved by its means, the crude and unsatisfactory process of the use of an animal product such as serum; we still hope at no distant date to be able to produce in our laboratories a pure and perfect material for the cure of anthrax in man, that will bear the same relationship to the use of serum that our protective vaccine for anthrax bears to the present methods of inoculation for pleuro-pneumonia or tick fever in cattle.

Our experiments as far as they have gone seem to indicate:—

(1st) That the injection within eight hours of infection of an adequate dose of serum of an immune sheep, that is, one that has been vaccinated against anthrax and the immunity of which has been subsequently proven by its perfect resistance to the injection of the virulent germ, is capable of effecting a cure for anthrax in sheep.

(2nd) That the minimum doses requisite for sheep are 40 c.c. if used four hours after the injection of the one-tenth of a c.c. of a cultivation of virulent anthrax, 150 c.c. if used six hours afterwards, and 250 c.c. if used eight hours afterwards.

(3rd) That if the initial dose is too small, after injections are of little value unless used frequently and in excessive quantities.

(4th) That as the injection of large quantities of the serum appear to have no ill effect on the animal, the doses quoted above might with advantage be largely increased.

We append notes of three experiments selected from the field tests carried out at our Borambola laboratory.

EXPERIMENTS NO. I.

Ewe treated with virulent anthrax, 5 p.m., 3rd June, 1899. Injected 40 c.c. immune serum four hours afterwards. Temperatures: 103° at four hours, 105·4° at 18 hours, 105·6° at 46 hours, 104° at 58 hours, and 103° at 82 hours, normal afterwards. This sheep was subsequently kept under observation for 15 days and remained perfectly healthy.

Ewe inoculated with virulent anthrax, 5 p.m., 3rd June, 1899. Injected 20 c.c. of immune serum four hours after, and subsequently injected 50 c.c. more at 42 hours. This sheep, as shown by the temperature scale, was brought by this treatment back to normal, but died of anthrax on the 12th day after inoculation, showing that the initial dose was not sufficient nor the subsequent doses numerous and large enough. Temperatures: 103° at four hours, 105·2° at 18 hours, 107° at 46 hours, 105° at 58 hours, and 103° at 82 hours. Died on the 12th day.

EXPERIMENTS NO. II.

Ewe inoculated 8 a.m., 17th June, 1899, with virulent anthrax. Injected 40 c.c. of immune serum four hours and ten minutes after. Temperatures: 103° at four hours, 104° at 24 hours, 104° at 48 hours, 104° at 52 hours, and 104° at 72 hours; normal and healthy after this.

Ewe inoculated with virulent anthrax 8 a.m., 17th June, 1899. Injected 20 c.c. immune serum four hours after, 20 c.c. more at 23 hours, 20 more at 29 hours, 20 more at 33 hours, 20 more at 48 hours, 20 at 52 hours, 50 at 57 hours, and 50 at 78 hours, in all 220 c.c. This sheep showed the development of the fever more than once, but, though the initial dose was small, repeated subsequent doses effected a complete cure. Temperatures: 103°

at four hours, 105° at 24 hours, 105° at 36 hours, 104° at 48 hours, 105·6° at 52 hours, 104° at 72 hours, afterwards normal.

Ewe inoculated with virulent anthrax 8 a.m., 17th June, 1899. Injected 40 c.c. immune serum eight hours after, then 40 more at 23 hours, 40 at 33 hours, 40 at 48 hours, 40 at 53 hours, 50 at 58 hours, and 50 at 81 hours. This sheep died at 92 hours, showing that with the anthrax having a start of eight hours in a sheep the initial and subsequent doses were not sufficiently large. Temperatures: 103° at four hours, 106° at 24 hours, 105° at 36 hours, 105·6° at 52 hours, 104° at 72 hours, 106·4° at 80 hours. Dead at 92 hours.

At the same time similar results were shown by another sheep treated with immune serum at eight hours, and also in two treated at 12 hours. In all these the doses used were insufficient to cure.

EXPERIMENTS NO. III.

Ewe treated with virulent anthrax 3 p.m., 22nd June, 1899. Injected 100 c.c. of immune serum six hours after, then 100 c.c. at 48 hours, 100 c.c. at 72 hours, and 50 c.c. at 89 hours, effecting complete recovery after strong development of anthrax fever. Temperatures: 103° at four hours, 104° at 24 hours, 107° at 72 hours, 106° at 89 hours, and 104° at 110 hours, afterwards normal.

Ewe inoculated with virulent anthrax 3 p.m., 22nd June, 1899. Injected 100 c.c. immune serum six hours after, then 100 c.c. at 48 hours, 50 c.c. at 72 hours, and 20 c.c. at 89 hours. This sheep developed marked fever, but recovered easily and well. Temperatures: 103° at four hours, 104·6° at 24 hours, 105·6° at 48 hours, 104·6° at 72 hours, 103° at 89 hours, afterwards normal.

Ewe inoculated with virulent anthrax 3 p.m., 22nd June, 1899. Injected 250 c.c. immune serum eight hours after. This sheep received only the initial dose, and, though fever developed, this proved sufficient to effect a recovery. Temperatures: 103° at four hours, 104° at 24 hours, 105·6° at 48 hours, 104·6° at 72 hours, 103° at 89 hours, afterwards normal.

Another sheep in this experiment also received 250 c.c. eight hours after inoculation with virulent anthrax, but succumbed, thus showing that the difference in individual constitutions came into account and the necessity for a larger dose to ensure a cure.

These notes exhibit some of the most striking of our results, and have been confirmed by the general course of numerous other

tests. In all cases control sheep were inoculated with the virulent germs at the same time as the test sheep and succumbed at the usual period after infection.

INTERCOLONIAL MEDICAL CONGRESS OF AUSTRALASIA—FIFTH SESSION —BRISBANE.

THOSE New South Wales members who intend visiting the approaching Intercolonial Medical Congress, to be held at Brisbane, from September 18th to 23rd inclusive, will be required to fill up the requisite form on applying for their railway tickets. The form in question can be obtained from the local secretary, Dr. Philip Muskett, 143 Elizabeth St., Sydney, on making application, or by writing. The special concession, return fares at single rates, include, not only the member, but also his wife (or daughter or brother or sister).

THE TALLERMAN TREATMENT BY SUPER-HEATED AIR, WITH NOTES OFTEN CASES UNDER TREATMENT AT MR. O'HARA'S PRIVATE HOS- PITAL, MELBOURNE.

By T. R. H. WILLIS, M.B., B.S., MALVERN,
VICTORIA.

It is inexplicable why this method of treatment has not come into more general use in Australia. Originally introduced in England by Mr. Lewis A. Tallerman in 1893, it was soon adopted as a therapeutic measure on the continent and in America. Dr. Arthur Shadwell has published a book (1898) describing the *modus operandi*, and furnishing reports of cases treated, among others, by such men as Walsham, Knowsley Sibley, Willett, Mayo Collier, Ward Cousins, and Arthur Roberts in England; Professor Landouzy and M. Oulmont in Paris; Gibney in New York; and Professor Jas. Stewart in Montreal. Full notes describing the progress and results are given in 150 to 160 cases. A record of thirteen cases by the Drs. Myrtle is published in the *British Medical Journal*, of January 21st, 1899. In most of the cases a cure was effected, in almost all relief was obtained, in a very few the treatment failed; with proper care no ill effects follow in any patient. The diseases in which the treatment was applied efficaciously were rheumatic gout (rheumatoid arthritis, arthritis deformans), acute and chronic rheumatism, gonorrhœal rheumatism, gout, sciatica, lumbago, tuberculous inflammation of joints, sprains and injuries to joints

periostitis, some atonic ulcers, and some cases of flat foot. The most brilliant results were obtained in rheumatic gout, as medical men generally know these are about the most intractable cases one can encounter so far as internal medication goes; it is the usual thing for the patient struggling in the hopeless misery of this complaint to go steadily down-hill in defiance of all our efforts. And yet the published results show that most of these cases can be cured by the application of super-heated air. If the disease is too far advanced for perfect cure at least relief from pain is gained—a very important matter. Equally effective, but of course less showy, results are reported in cases of chronic rheumatism, gonorrhoeal rheumatism, and gout. Recent rheumatic arthritic or muscular attacks yield readily to the treatment, as do recent cases of such allied disorders as sciatica and lumbago. In injuries to joints and synovitis its influence is more rapidly apparent than that of the ordinary routine treatment. Examples of this will be found in two of the cases detailed below; in one an acute attack of synovitis of the knee, from a bicycling accident, was cured by three baths of super-heated air in five days; in the other a patient who had been unable to walk for thirteen weeks walked with ease three hundred yards after the first bath, and was cured by five baths. Such a method of cure should be appreciated by racing clubs, football and bicycling associations, and other bodies controlling the varied forms of athleticism. As showing how general the use of super-heated air has become in England the *Windsor Magazine* recently published an article on "A Footballer's Hospital," giving a picture and description of a super-heated air apparatus. Some of the health resorts in England also now include in their advertisements the fact that they possess the necessary appliances for this method of cure. And yet its use is practically unknown in Australia. Knowing the number of cases of rheumatic affections and of joint injuries treated at the charitable institutions in these colonies a super-heated air cylinder should form part of the *armamentarium* of every hospital.

The cases reported below were treated under most disadvantageous conditions, as without exception they had to travel some miles from the suburbs in the depth of an unusually severe winter for each bath; yet the results have so far been very satisfactory. Of ten cases five have been cured and five (three of whom are still under treatment) markedly relieved. Any medical practitioner who doubts the advantages derivable from the treatment, and many will

naturally doubt, should read Dr. Shadwell's book, "On the Tallerman Treatment." The apparatus consists of a copper cylinder, to all intents and purposes an efficiently-ventilated oven, which is heated by gas, electricity, or oil, and into which one or other of the patient's limbs is inserted. For most cases a temperature of 240° to 280° is sufficient (in my own cases it will be seen that 280° was the highest temperature used) but patients have been treated at 300° to 400° beneficially. The apparatus is provided with a simple means of preventing scalding. The duration of the bath is from thirty to sixty minutes, or more.

The effects produced are:—(1) Profuse acid perspiration (general); (2) temporary erythema of the skin of limb in cylinder; (3) increase in the rate of the pulse, which also becomes fuller and more forcible; (4) increased number of respirations (usually); (5) heightened temperature; (6) decided relief from pain; (7) quiet, restful sleep at night. In fifteen to thirty minutes after a bath the pulse, respirations, and temperature are normal again. In no case has there been any pain or inconvenience during or after a bath.

Sibley, in the *Lancet*, August 29th, 1896, says:—"The treatment appears to lower the blood pressure of the body, and in some way to increase the alkalinity of the blood, which enables it to dissolve the uric acid from the tissues and joints, and get rid of this substance through the various excretory organs. This is evidenced by the relief from local pain, and the removal of the frequent uric acid nerve-depression. Hence the treatment is of a tonic nature, and bestows an increased general vitality upon the patient." Dr. Chrétien found "that in one case of ordinary gout the daily elimination of uric acid, which after the fourth bath was 57 centigrammes, rose after the ninth bath to 89 centigrammes; and in another case of arthritis the daily co-efficient of urea had changed from 20 grammes 97 centigrammes before treatment to 25 grammes 50 centigrammes after the treatment had been administered. They also found an increased excretion of all the salts, especially the chlorides. The results in the French hospitals were obtained entirely by this external method, and without the exhibition of drugs of any kind."

"The increased local circulation, relaxation of the tissues, and free perspiration, are the ordinary effects of the application of heat, and call for no special explanation. But it is to be observed that, owing to the very high temperature to which the part is continuously

*Shadwell—"On the Tallerman Treatment."

subjected for a considerable period of time, they are all produced in a much higher degree than by any other existing method. That is, indeed, the distinctive peculiarity of the treatment as a local application, and to it much of the therapeutic effect must be ascribed. The elimination of morbid products is more complete, the improvement of nutrition more rapid, and the reaction more powerful, in proportion to the temperature employed and the length of time it is maintained. But that is by no means all; the local effects are accompanied by general ones, which are less easy to understand; the whole circulation is quickened, and the body temperature raised, with all the results involved in these changes."

In the cases reported below will be found tables showing the temperature, degree of heat used, pulse rate, and respiration rate, before the bath and at the end of every fifteen minutes during its continuance; they show the rise in temperature and increased rapidity of pulse and respiration.

I have to express my gratitude to Mr. O'Hara not only for advice and assistance, but for placing apartments at my disposal in his private hospital in order to experiment with this method of treatment.

Case I.—L., *et.* 27.

GNORRHOEAL RHEUMATISM OF LEFT KNEE.

First bath, May 17, 1899. Limb treated, left leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respiration.
Before bath	98.4	—	64	...	16
After 15 min.	98.8	180	76	one hour	18
" 30 "	98.8	220	76	...	18
" 45 "	99	235	88	...	20
" 60 "	99	240	100	...	24

Ninth bath, May 28, 1899. Limb treated, left leg.

Before bath	98.6	—	84	...	16
After 15 min.	98.8	190	92	one hour	16
" 30 "	99.2	215	96	...	18
" 45 "	99.4	225	108	...	20
" 60 "	99.4	235	112	...	20

Sixteenth bath, June 15, 1899. Limb treated, left leg.

Before bath	98	—	56	...	16
After 15 min.	98.4	210	68	one hour	16
" 30 "	98.4	225	76	...	16
" 45 "	98.4	235	80	...	18
" 60 "	98.4	240	80	...	20

May 17th, 1899.—Patient has been ill for two years and eleven months. Rheumatism of the left knee set in a week after the gonorrhoeal discharge commenced; no other joints were involved; he never had either disease before. No history of excessive indulgence in alcohol or tobacco. Father, a healthy man, was drowned; had occasional twinges of gout; never had rheumatism. Mother died from diabetes;

never had rheumatism nor gout. One brother died from phthisis at the age of 26; one brother now has rheumatism in one shoulder and arm. Patient was at the outset confined to his bed for four months, and on first getting about again had a perfectly stiff joint, considerably swelled. Besides internal medication patient underwent treatment by hot sea-baths, steam-baths, and massage (150 to 160 applications). The swelling decreased, but the joint remained painful and almost immovable; the patella was at first fixed, but ultimately a little motion was obtained. He has recently been anaesthetised three or four times, and some adhesions forcibly broken down, but without any permanent benefit.

When first put under the Tallerman treatment the knee was almost immovable; there was an extremely limited amount of patellar movement laterally; the leg was slightly abducted on the thigh. There was no appreciable swelling about the joint; distinct grating could be felt on forcible passive motion. Circumference of joint, 14½ inches. No cardiac trouble.

After the second bath (May 18th) the joint began to give slightly under passive motion, which caused very little discomfort. After the fifth bath (May 21st) patient stated that the pain was greatly relieved, and that he could walk with more ease; also, that he slept more soundly than before the treatment began.

Before having the seventh bath (May 25th) patient was put under chloroform, and an attempt made to break down any adhesions that might exist. Patient was fifteen minutes under chloroform, but no gain in flexion was obtained with all the force that Dr. O'Hara and I could use with safety; a very few adhesions gave way. Patient afterwards complained of great soreness and stiffness in the limb; he was put under hot-air treatment within half-an-hour, and the pain was relieved shortly after the leg was placed in the cylinder. Dr. O'Hara and myself have come to the conclusion that the immobility of the limb is largely due to muscular contraction and adhesions about the insertion of the quadriceps tendon, with probably some contraction or fixation of the crucial and other ligaments. Patient had a good deal of pain and a restless night after the abortive effort under chloroform, but was altogether easier than he had ever been after previous attempts to break down adhesions under an anaesthetic; he says he had to lay quite still in bed for two days after previous attempts; on this occasion he was able to go into town to his business as usual next day.

This shows the great relief to pain from the application of the super-heated air.

June 28th.—Patient has now had twenty applications, and is able to move his leg through about half a right angle; the improvement is very slow from day to day, but is very clear when compared with his condition when first treated. He has had no pain in the joint for the last three weeks. His business will prevent him attending as regularly as he has been doing of late, but he is still under treatment, and will have an occasional hot-air bath when practicable. There is every promise that he will eventually get very fair movement in the affected joint.

Case II.—L., *æt.* 30.

SYNOVITIS OF LEFT KNEE.

First bath, May 17, 1899. Limb treated, left leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98.8	—	84	...	16
After 15 min.	99	180	96	one hour	18
" 30 "	99	210	112	...	18
" 45 "	99.2	236	112	...	18
" 60 "	99.6	240	116	...	20

Second bath, May 18, 1899. Limb treated, left leg.

Before bath	98.4	—	80	...	16
After 15 min.	98.8	180	96	one hour	20
" 30 "	99	215	104	...	20
" 45 "	99	230	104	...	20
" 60 "	99	240	112	...	20

Third bath, May 19, 1899. Limb treated, left leg.

Before bath	98.8	—	80	...	18
After 15 min.	99	180	100	one hour	18
" 30 "	99	220	104	...	20
" 45 "	99	230	112	...	20
" 60 "	99	245	116	...	22

Patient had a fall from his bicycle on May 12th, 1899. He was first seen by me on May 16th, when I advised him to undergo the Tallerman treatment. He had a superficial abrasion over the left patella about $\frac{3}{4}$ in. in diameter. There was a considerable amount of effusion into the left knee-joint, which was exceedingly hot and tender. He had had a jar of the same joint about a fortnight previously. Had never injured any joint before. Previous to having the first hot-air bath he could only get the slightest flexion of the joint, and that only with intense pain; he walked with very great difficulty.

May 19th.—After the first bath patient was able to bend the knee almost to a right angle without pain, and could lace his boots with the knee thus flexed; he then walked with ease about 300 yards to the railway station. On coming for the second bath there was found to be a very definite decrease in the swelling, and there was a further decrease after the second and third baths. The relief to pain was rapid

and remarkable; he suffered no pain at all after the heat was first applied.

May 28th.—Did not see patient again until to-day; he tells me that he was quite well after the third bath, and has remained well.

Case III.—K., *æt.* 39.

SCIATICA (R.)

First bath, May 22, 1899. Limb treated, right leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98.4	—	80	...	18
After 15 min.	99.2	170	84	one hour	20
" 30 "	99.2	200	88	...	20
" 45 "	99.2	220	88	...	22
" 60 "	99.2	235	92	...	26

Second bath, June 3, 1899. Limb treated, right leg.

Before bath	99.2	—	100	...	20
After 15 min.	99.2	190	104	one hour	24
" 30 "	99.4	210	104	...	24
" 45 "	99.4	230	112	...	24
" 60 "	99.4	235	112	...	24

Third bath, June 5, 1899. Limb treated, right leg.

Before bath	99	—	84	...	20
After 15 min.	99	150	84	one hour	24
" 30 "	99	190	84	...	24
" 45 "	99	215	84	...	24
" 60 "	99	230	88	...	24

Fourth case, June 7, 1899. Limb treated, right leg.

Before bath	99	—	80	...	20
After 15 min.	99.2	200	88	one hour	24
" 30 "	99.2	215	88	...	26
" 45 "	99.2	225	96	...	26
" 60 "	99.2	235	96	...	28

May 22nd.—Patient, who is an overseer on the re-grading works on the railways, has never had any other illness, though he often gets severe headaches in the summer. Has had occasional slight attacks of sciatica for the last five months. Had the first severe attack of pain eight days since, and is steadily getting worse. Has been treated with salicylates, and afterwards with iodide of potash; has had morphia hypodermically, which gave temporary ease; has had liniments rubbed on the limb, and finally two large blisters applied. Father had sciatica twice after reaching the age of 55 years; no other rheumatic history. No gout nor rheumatism on the mother's side. Patient's idea is that he laid the foundation of the present attack by floating timber down the Goulburn River for seven years; he was sometimes working in the water all night, and frequently did not change his clothes next day. No history of syphilis; never drank excessively; has been a very heavy smoker; the latter habit eventually brought on a sharp attack of gastric catarrh. No cardiac complications.

When he first came for hot-air treatment he was only able to walk with pain, and used a stick; could put very little weight on the leg, and was afraid to bend it.

After the first bath, on May 22nd, patient was able to walk easily without a stick, and got into and out of a waggonette without pain or difficulty, except that the blisters smarted him on movement. About 8 p.m. (five hours afterwards) he got severe pains in the calf of the leg and foot, from the knee to the little toe, which persisted all night. This was probably due to his cramped position in the vehicle during the seven-mile drive to his home, coupled with the intense cold prevailing.

From May 22nd to June 2nd, patient had occasional attacks of pain, but would not venture on the drive into Melbourne again because of the wet, cold weather. On the night of June 2nd the pain was intense, and he had no sleep. He had walked about a quarter of a mile during the day.

June 3rd.—Now has pain in the thigh, calf of leg, and sole of foot; says he has almost complete numbness from the knee down; he walks very stiffly, leaning on a stick, and cannot put any weight on his toes. After the bath to-day he felt much better, could put all his weight on the foot, and walked well without a stick.

June 5th.—Has had a good deal of pain, but not acute; is restless at night; walks without pain, but cannot sit for any length of time; says he feels much improved, as the pain is bearable. Was ordered sod. salicylas gr. xiiss. and potass. acetat. gr. xiiss. twice daily, and a dose of mag. sulph. twice a week.

June 7th.—Has slight pain in the thigh, calf, and foot at different times. Slept quite peacefully last night; can walk very well. The numbness in the leg is disappearing. He can dress himself now without assistance, and can sit on the heel without any pain.

June 9th.—Patient had his fourth and final bath to-day; he is well, but still limps slightly; says he has no pain, and feels only a little stiffness. I wanted him to have another bath, but he said he was quite well and did not require it.

June 20th.—Patient sends me word that he has no pain, and is at his ordinary work.

(To be continued in a future issue.)

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 25th August, at 8.15 p.m.

Business:—General.

G. T. HANKINS, Hon. Secretary.

A CASE OF PUERPERAL SEPTICÆMIA TREATED WITH ANTISTREPTOCOCCIC SERUM.

By J. A. G. HAMILTON, B.A., M.B., T.C.D.,
ADELAIDE, S.A.

As the number of recorded cases of puerperal septicæmia which have been treated with anti-streptococcic serum in this colony is small, it is highly desirable that all such cases should be reported, in order that a true estimate of the value of the treatment may be made. The Editor of the *American Year Book of Medicine and Surgery*, for 1898, sums up all the work of the two preceding years in the field of serum-pathology, as applied to puerperal septicæmia, with the discouraging remark that the use of anti-streptococcic serum is a proceeding of doubtful value. Nevertheless it is to be hoped that with good serum, in selected cases, clinical results may become more uniform. The exact properties of the serum are only partially determined. Bordet has clearly shown that this serum has no more bactericidal properties than ordinary serum, and that streptococci lose none of their virulence when cultivated in this antitoxin serum. He maintains that its principal value lies in its power to stimulate the leucocytes. Italian bacteriologists, however, hold that, besides its stimulation of phagocytes, it also renders the plasma capable of paralyzing more or less the micrococci. The study of statistics certainly does not lead one to expect brilliant results from this treatment, but the poor results may be due to the use of inferior serums or to delay in commencing the treatment. Undoubtedly, when possible, a bacteriological examination should be made of the uterine discharges, but, as the sepsis is frequently due to a mixed infection, no time should be lost whilst waiting for a bacteriological examination.

I bring this case before the Society to-night, as I think it contains a particularly useful object lesson. I attended the patient during two attacks of puerperal septicæmia, following her two last confinements. The first attack was treated by curetting, irrigation, and packing the uterus with iodoform gauze; the last attack by the same measures combined with the injection of antistreptococcic serum. The use of serum in no way dispenses with the necessity for local treatment, as probably in all cases of puerperal septicæmia there is a mixed infection, and other organisms besides the streptococcus pyogenes are present in the uterus, and capable of causing a fatal toxæmia, if their growth is not prevented.

Mrs. C., 3 para, was confined in April, 1897. I understand she had an easy and normal labour. I saw her for the first time seven days after her confinement, and found the temperature 104°, pulse 120, skin dry, abdomen distended and very tender on pressure, uterus large, lochia normal in quantity, slightly offensive; had a rigor on preceding night. The uterus was curetted, irrigated with creoline lotion, swabbed with T. iodi., and packed with iodoform gauze. This treatment was continued daily for four weeks. During this time her condition was grave—high temperature, diarrhoea, greatly distended abdomen, marked depression. In the third week she got a pleuritic rub on left side. This was followed by phlegmasia dolens of both legs. Altogether she was confined to the hospital for nine weeks, and was a very long time before she was convalescent.

The same patient was confined again on February 2nd, 1899, of twins—breech and vertex. I saw her on the afternoon of the day she was confined. She had been in indifferent health during the whole of her pregnancy, and had a profuse leucorrhœal discharge, at times offensive. She then had a temperature of 101.4°. I ordered a vaginal douche in 1:2000 perchloride solution, and did not see her again until February 6th, four days after her confinement. She then complained of severe pain in left side, abdomen somewhat distended and tender on pressure; temperature, 101.6°; pulse, 116; lochia slightly offensive. I gave an intra-uterine douche of 1:2000 perchloride, and ordered 5 gr. of quinine every four hours. February 7th: Morning temperature 104.4°; pulse, 128. Great pain in abdomen; diarrhoea. Curetted uterus; some clots and pus came away. Irrigated freely with solution of lysol. Injected 10 c.c. of antistreptococcic serum into abdominal wall. Evening temperature, 100°; pulse, 102. February 8th: Morning temperature, 103.4°; pulse, 130. Great pain in left groin; 10 c.c. serum injected, uterus douched. Evening temperature, 101°; pulse, 110. February 9th: Morning temperature, 100.8°; pulse, 98. Very much better since serum injection. Evening temperature, 102°; pulse, 98. Serum injected; uterus washed out. February 10th: Morning temperature, 100°; pulse, 98. Profuse perspiration; lochia offensive; uterus washed out. February 11th: Morning temperature, 100°; pulse, 94. February 12th: Morning temperature, 100°; pulse, 98. Uterus douched. Evening temperature, 101.2°; pulse,

106. Serum injected. February 13th: Morning temperature, 105°; pulse, 124. Uterine douche; serum injection; ice applied to abdomen and head. Evening temperature, 101°; pulse, 98. During night temperature went up 103.8; another serum injection. February 14th: Morning temperature, 99.8°; pulse, 94. Evening temperature, 100.6; pulse, 101. Uterine douche. February 15th: Morning temperature 99.8°; pulse, 94. Uterine douche; lochia very offensive; uterine douche. At 12.15 patient had a severe rigor. Temperature ran up to 104.8°; pulse, 128. Uterus again curetted; nothing came away; serum injection 6 p.m. Temperature, 98.6; pulse, 94. February 16th: Morning temperature, 99.2; pulse, 90. Evening temperature, 99°; pulse, 100. February 17th: Morning temperature, 99.2°; pulse, 90. Evening temperature, 99.4°; pulse, 98.

From this date, patient made a steady recovery. The intra-uterine irrigation was kept up until the 18th. On February 23rd, patient was practically well, three weeks after confinement. So decided were the results of serum injection in her case, that one cannot escape from the conviction that the serum had a marked beneficial effect, the good effects even noted in a few hours—temperature always dropping several degrees and remaining low for some considerable time, appetite improved, and the great mental depression disappeared.

On February 15th, the lochia being offensive, the uterus was explored and freely irrigated with lysol. Notwithstanding this, the temperature a few hours after ran up to 104.6° and she had a rigor, but after an injection of serum the temperature at 6 p.m. the same day was 98.6°, and after this the temperature never went up over 100°. Each injection of serum was marked by a decided fall in temperature and pulse. Apart from the antiseptic treatment of the vagina and uterus, no other treatment was adopted except a few doses of quinine and phenacetin. The serum used was from Pasteur's Institute; in all, 80 c.c. were injected. Comparing the two attacks of sepsis in this patient, I think I may fairly claim that antistreptococcic serum proved more effectual than curettings, irrigations, and packings. One cannot under-rate the importance of local treatment, but combined with serum injection, the second illness, although more virulent than the first, only confined the patient to bed for three weeks, as against nine, and there were no complications. I have used the antistreptococcic serum in two or three other cases, but never with such marked effect as in this particular patient.

THE HEROIC TREATMENT OF SCIATICA.

BY JOHN S. PURDY, M.B., C.M. (ABERD.),
HUTT, NEW ZEALAND.

HAVING been for some time in practice in the coal-mining district of the North of England, where the conditions of life and work are such as to cause this troublesome complaint, I had the opportunity of trying most of the remedies recommended.

When of an undoubted rheumatic origin, 25 gr. of salicylate of sodium every three hours generally gave marked relief, combined with rest in bed and hot salt-water baths.

In cases distinctly chronic, or with acute attacks grafted on them, full doses of pot. iodide occasionally shewed good results.

Blistering with cantharidis, the application of capsicum paste, enveloping the leg in powdered sulphur, and the application of various liniments were also tried with varying degrees of success.

The absence of the tendo-Achillis reflex as pointed out by Babinski, was elicited as a point of diagnosis, chiefly to exclude malingering. Most of the miners being members of friendly societies, lumbago and sciatica were occasionally feigned, or at least the symptoms exaggerated.

In September of last year I received an advance specimen copy of the *Medical and Surgical Review of Reviews*, which reported the successful treatment of sciatica by painting hydrochloric acid along the course of the sciatic nerve. This mode of treatment was quite an accidental discovery. According to the *Semaine Medicale*: "A man who had suffered for many years from sciatica was treated in an Algerian hospital by means of hypodermic injections of salt and water, but without success. After he had left he bethought him that perhaps the salt was not strong enough, and that a stronger preparation of salt might be more successful. He therefore procured some 'spirit of salt' (hydrochloric acid) and painted it on the skin, getting rid of his long-standing trouble in a few days." He informed Dr. Bourlier, professor of therapeutics, who then employed the treatment with gratifying results.

The procedure as adopted by Dr. C. Gennatas, of Montpellier, who has published a monograph on the subject, is to take half an ounce of strong hydrochloric acid and paint it three or four times over the painful part of the nerve. The limb is then enveloped in a cotton-wool dressing. The skin soon becomes reddened and hot. A second application may be made in forty-eight hours, after which four days must elapse before applying the remedy a third time.

Dr. Gennatas' cases all recovered in from three to five sittings, extending over from a week to twenty-five days.

According to the *Therapeutic Gazette*, excellent results have also been obtained by E. Radzikowsky. In some of his cases, anodynes had also to be administered internally, which in some measure mitigated the result.

The first case I tried, in October, 1898, was that of an agricultural labourer. He complained of "burning, shooting pain," extending from the sciatic notch to the heel. Tendo-Achillis reflex absent. Had been treated with salicylates, hot baths, and ten days' rest in bed without marked benefit.

I painted pure hydrochloric acid along the course of the pain, then dressed the burn with ungt zinci, and bandaged the leg. After the first application the patient expressed himself as markedly relieved.

The next case treated was that of an old miner who had been working in a "wet seam." Two applications were insufficient in his case to effect a complete cure; but four days after the third sitting, a fortnight after the first, he was able to return to work.

Four other cases gave satisfactory results. The superficial pain and discomfort in one case was so severe that it was necessary to open the blisters and dust on pulv. opii.

Since coming to New Zealand I have only treated one case, in which I used pure nitric acid instead of the hydrochloric. Up to the time of writing, twelve days after first application, there has been no return of the sciatica.

In a case of intercostal neuralgia marked benefit was also seen.

I have little hesitation in recommending a more generous trial of this treatment, and am sure that its adoption will be gratifying.

Of course it is unsuitable except in cases of fairly strong men, though most patients will submit to it "as a last resort," anything being preferable to the agonising pain of the neuritis, and it is certainly less painful than acupuncture.

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NOTES ON OPERATIONS FOR PERFORATION IN TYPHOID FEVER.

By C. RYAN, M.B. CH.M. EDIN, MELBOURNE.

OF the many complications of enteric fever which the physician may encounter, there is none more to be dreaded than the occurrence of a perforation. There is, moreover, none about whose diagnosis there may be, in certain circumstances, so much difficulty, none whose course is more surely and progressively downwards, and none in which the skill of even the ablest physician is less availing in arresting a fatal termination. Add to all these characteristics the relative frequency of enteric fever in our country, to the Australian physician the occurrence of a perforation becomes at once the most to be feared of all the many complications of this disease, and as such, merit our earnest consideration. Any communication, therefore, as to the treatment of this accident which sheds any light on our present darkness, should be hailed with welcome.

The results of perforation treated medically up to the present time are so appalling as to send a shudder of apprehension through even the most competent of physicians. Osler puts the occurrence of perforation down as 134 out of 2,080 cases, and in 20 of his own 80 cases. The latter proportion seems unusually high, viz., 25 per cent.

Though the perforation is usually followed by rapid peritonitis and death, we occasionally hear of an isolated case where, by a combination of favourable circumstances, a recovery is chronicled. Steel, in the *British Medical Journal* for January, 1897, records a remarkable case where the perforation occurred low down in the ileum, and formed an abscess around the appendix, which completely recovered, but these cases are so few and far between, that we may almost neglect them, for certainly the large majority of them have only one ending if left alone, that is if treated medically.

Naturally, in the face of such invariable disasters, the surgeons aid has been invoked and though, up to the present, there is not a halo of success surrounding the operation, still the results are far from discouraging, and even if only one or two out of every hundred operated on were to recover there are sufficient prospects to beckon us on, and give us hope for still greater successes in the future.

A patient is brought to hospital with a stab in the abdomen, perhaps he is in good health, perhaps not, but whatever condition he is in,

if left alone and treated medically there is only one outlook, and should the intestines be perforated there are few surgeons if any who would leave such a case to its inevitable fate, however hopeless the prognosis.

It might be advanced that the case I have quoted belongs to a very dissimilar type, where there does not exist the profound exhaustion, and consequently greater tax upon the patient, and where the recuperative powers are not so markedly lowered as in enteric fever. But, this line of reasoning is altogether fallacious, since the cases in which perforation may occur, are not all of this unfavourable type many or even most of them being mild in degree, in fact perforation may occur in cases of every grade of severity. Again, it behoves the surgeon who does his duty, not to choose those cases only which shall reflect credit on his ability, but to exercise all reasonable means in his power, which a scientific education and a technical skill have endowed him with to relieve his patient, even though the chances of success are small, especially when alternative measures give absolutely no expectation at all, as regards continuance of life. Seeing then, that treated in one manner the patient is lost without almost a ray of hope, and that treated in another manner there is a prospect in quite a fair proportion of cases: it has seemed to me advisable to contribute this case, and to preface the notes by a few remarks regarding perforations in general.

And first, as to diagnosis. This, in quite a large number of cases, is easy, though in exceptional cases it is blurred by other conditions and circumstances. The cardinal signs and symptoms set out in the text-books of the onset of perforation, and which also are observed in practice, are sudden lancinating pain at some part of the abdomen, usually over the cæcum, or perhaps distributed over the abdomen; the chief features of the pains themselves is their suddenness, and the fact that they are usually attended more or less closely with collapse, and that the patient may complain of quite a circumscribed area of tenderness.

As a result of the collapse, the temperature drops just as suddenly, and the pulse falls in volume but rises in frequency. As a consequence of the acute tenderness we usually find the abdominal muscles watchful and on guard, and following on the admission of the intestinal gases into the peritoneal cavity, we may find the abdomen distended and the liver dulness may be more or less obliterated, though distension of the intestines (not distension of the peritoneal cavity) may simulate it closely by

causing a general tympanitic note, the distended intestines so pushing the liver up as to make the lower border of the dulness appear higher than normal. The chief local distinguishing feature between the two, however, is that in the latter the liver dulness is pushed up as a whole, and the upper border will be found present, but higher than normal, whereas in the former the liver dulness is "more or less obliterated" altogether. The general symptoms which should guide us to an accurate diagnosis between the two are the pulse and temperature changes coming on quite suddenly.

From my experience I must say that obliteration of the liver dulness is far from constant, though when present it is evidence of decided value, with the above restrictions. As regards the differential diagnosis of a perforation, the only thing which simulates it very closely in general symptoms is the occurrence of an intestinal hæmorrhage or rupture of an appendicular abscess. Here the temperature suddenly falls, perhaps some pain is experienced by the sufferer, and there is a sudden collapse, with the development of a running pulse if the hæmorrhage is severe; the marked blanching of the skin with a large hæmorrhage is an important differentiating indication, as is also the fact that the pulse does not get "hard" after the collapse passes off; in fact, when the pulse changes it does so usually towards what the patient's normal was before the attack of bleeding came on. As a rule with a large hæmorrhage it is very evident, as some, almost to a certainty, becomes passed per rectum, but it must be within the recollection of all how a hæmorrhage of fair size, perhaps, has been passed in a semi-digested state; and on reflecting we are often able to remember, it may be, a collapse which we had noted on the chart, say, three days before, with a fairly sharp fall of temperature. Let it not be inferred that I regard the detection of this disaster (perforation) an easy matter for the number of perforations that are discovered in the mortuary prove fairly well this statement, and in certain cases the absolute diagnosis of a perforation may be almost impossible.

But mark the importance of accuracy, a mistaken diagnosis—operation, shock and death may possibly be the sequence of events.

If abdominal section be done, and no perforation be found, the patient may still die from the shock of the operation, or what is very probable during vomiting after the anæsthetic, he may really perforate. This is not nearly sufficiently impressed by any of the writers on the subject, and no doubt it may be a cause of

death, and on this account commends itself to our most serious consideration. Nevertheless, if some of the symptoms of hæmorrhage are cloaked in the same garb as those of perforation, there is one guiding mark, which hæmorrhage cannot assume, I refer now to that most characteristic of all the signs of perforation, the onset of distension after collapse and thermal fall. This must ever be our key to a correct diagnosis when in doubt. Of course, the general condition of the patient will usually confirm or refute our conclusions. Perforative appendicitis may cause symptoms somewhat similar to a perforation, but the history of the case is somewhat different, as a rule, and that is largely our safety in framing a positive opinion; of course, enlarged spleen, spots, and especially the presence of sloughs in the motions would correct a possible error at once, and the presence of sloughs in the fæces is very important, since it is during the process of sloughing that the accident is most likely to happen. Having arrived at a diagnosis, we must now decide what is the prognosis, this, moreover, is sufficiently indicated in my previous remarks from the medical aspect. However, something additional may be said as to a surgical prognosis, which I will append later on.

And here I might mention that there usually exists but one perforation, though in rare cases there have been two or more; this was notably the case in one of Dr. Snowball's at the Children's Hospital, and there is one other which I have in mind at the present time, where a perforation took place near the valve, evidently formed adhesions and an abscess, which later on burst into the bowel producing a second perforation in the lower part of the large intestine. Such cases are distinctly rare, and as a broad rule for guidance, I would lay it down that when one perforation has been found no prolonged search should be made, but the operation completed as quickly as possible.

I have found from enquiries from pathologists that by far the major proportion of perforations occur in the ileum (full 75 per cent.), next most frequently in the large intestine, and this demonstrates the morbid anatomy of enteric fever, since the greatest extent of ulceration takes place in the relatively thinner walled ileum.

Now various authors have declared that it is possible for adhesions to form over a perforation, and so act as a safety-valve against general infection of the peritoneum, but on reviewing the pathology of typhoid inflammation in general, I must feel inclined to doubt these assertions, except in very rare cases.

Dismissing these considerations, I come now to the practical intent of this paper, and we will consider the surgical treatment.

It becomes a question as to what abdominal incision should be made, whether median or lateral. Personally I should favour the median, because in the event of the perforation having taken place some time before the operation, in all probability the pelvis may contain several ounces of highly septic fluid (as occurred in my case) which could not be satisfactorily dealt with by a lateral incision. Immediately the abdomen is opened, the cæcum should be sought for and the ileum traced from below upwards. The perforation having been found, the intestines should be cleaned at the particular site, and the margins of the opening inverted and brought together by Lembert's sutures. It may be deemed necessary to insert a double rim. In the case of a large perforation such a procedure would eventually cause a very undesirable stenosis of the bowel, to obviate which, resection of the opening, and end to end approximation of the bowel would be an imperative measure. Personally I would rather avoid the use of Murphy's button, as there is a possibility of its passage down the bowel causing further perforation. The thorough cleansing of the abdominal cavity is next to be proceeded with. With regard to the use of a drainage tube, while being more and more inclined to favour its disuse in general abdominal surgery, I must admit (although I did not employ it in the case I am about to relate) that there is more indication for than against its use in these cases. The abdomen should now be closed; when the shock is profound it may be good surgery to leave in the abdominal cavity a considerable quantity of sterile saline solution.

It is almost unnecessary to point out that the operation should be performed with the utmost celerity, consistently with thorough surgery.

At the time of the operation the surgical prognosis must be taken into account, and this will largely depend on several points, and perhaps one of the most important is the date of the perforation, the later it is after the middle of the third week (?) the more favourable is the expectation, since the patient's recuperative powers are increased and the chances are much better. Another question herewith naturally arises, how much of the bowel is involved? for, obviously, if a large area be infected the prognosis must be more guarded, of course, the size of the perforation, and the

facility with which the surfaces may be apposed enter into our consideration.

Wm. S., *æt.* 38, farmer, admitted 17th January, 1899. Patient has pain in the back and headache. Ill 14 days, quite well before that, and he worked till five days ago. He has been in bed for four days. Feels languid and sore all over. Slight cough, no epistaxis, sleeps well, no delirium. Some tendency to retention to-day. Appetite bad; vomiting the past few days; bowels loose, four times to-day. No previous illnesses: a teetotaller.

On examination.—On admission, temperature 100·8°, four hours after 104°; pulse 92, regular, tendency to dicrotism; respiration 28, easy. Tongue moist, coated, but at tip is dry and brown. Heart and lungs clear. Abdomen flat, a crop of spots. Increase of splenic and liver dulnesses. Tender in epigastrium and in right iliac fossa.

18th January, 1899. Temperature, 104·6° to 101·8°, abdomen distended. Bowels open four times. Urine, a trace of albumen.

20th January, 1899. Temperature, 103°-100·8°; pulse 100, dicrotic. Was very distended last night. Had enema *asafoetida*; distension less.

21st January, 1899, at 1.30 p.m., had sudden acute pain all over the abdomen, which he described as like knives; pain made him cry out and draw up his knees. Temperature 99·6° during the pain. No vomiting, never had hemorrhage nor passed sloughs. At 2.30 was examined again. Temperature had gone down to 98·2°, but immediately rose to 100·8°. Liver dulness obliterated in lower part but made out above. Upper abdomen rigid, lower abdomen distended, slight abdominal breathing, pain much relieved by fomentations. At 3.30, liver dulness almost obliterated; patient more distended; pain is paroxysmal; slept between the attacks; had $\frac{1}{2}$ gr. morphia; pulse, 108° hard; has lost its dicrotic character; hands cold. At 6 p.m. he was operated upon.

The signs of perforation were not well marked, the diagnosis being based on the sudden intense pain in the abdomen, followed sharply by a fall of temperature and obliteration of the liver dulness.

I was largely guided by Dr. James' opinion who had charge of the case, and who noticed the sudden accession of symptoms, and so I thought that it was considerably less risky to cut down than to leave the patient unaided.

At the time of the operation, that is six hours after the accident, he had recovered partly from the collapse, but the hands were still cold.

As soon as the peritoneal cavity was opened there was a small escape of gas, the small intestines were found considerably distended and much congested; there were flakes of adherent lymph among the intestines; the pelvis contained about a pint of offensive turbid looking serum with a strong faecal odour.

On working towards the right side, about 18 inches from the caecum, a perforation about the size of a pea was encountered on the free surface of the bowel.

This opening was partially plugged with some faecal matter, by the side of which and issuing from the opening was a little putrid fluid coming away. The bowel was agglutinated, and there was a collection of three or four ounces of faecal fluid, which was becoming partly encysted by glutinous adhesions. The bowel was much thickened, feeling solid to the finger and friable. The ulcer was washed carefully, and a double row of Lembert's sutures carefully passed, the edges of the ulcer being inverted. I passed the double row because some of the first row tore out.

The intestines were well washed and replaced, prior to which the whole of the abdominal cavity, especially the pelvis, was freely irrigated with hot sterilized water, and the abdominal wound closed without a drainage tube.

The patient was started with ether, but at first it made him cough a good deal, so chloroform was substituted, and in coming out from the chloroform he vomited, causing a complete drenching of the bronchial tubes and a rapid septic broncho-pneumonia.

Apart from this the case may be said to have recovered so far as the actual perforation was concerned, since it *per se* did not enter into the immediate cause of death.

The patient did well for 18 hours, but he then got a troublesome cough, and his temperature rose a little. There was no pain in the abdomen after the operation, but coincidentally with the cough the respirations became hurried, and in 36 hours he died.

Post-mortem.—The peritoneum was quite clean, not a trace of any irritation, the wound watertight and airtight, whilst in the lungs there were extensive areas of collapse. Gastric juice could be obtained from some of the smaller bronchi. The right heart was dilated. There was typhoid ulceration of the small intestine.

On reflection, so far from being discouraged at its result, I am more than ever convinced of the necessity in properly-chosen cases of surgical procedure. In this particular one, at all

events, post-mortem evidence proved to my entire satisfaction that so far as the local lesion was concerned the surgical treatment adopted was not only justifiable but successful—death being attributable to the unfortunate result of vomiting, giving rise to a septic broncho-pneumonia. I have no hesitation in saying that but for that vomiting my patient would have recovered. Given a reasonably assured diagnosis of perforation, with the chance of operating within twelve or fifteen hours of its occurrence, provided also that the patient's constitutional condition does not, on general surgical principles, contra-indicate opening the abdomen, it would be a manifest neglect of opportunity to leave the patient to the otherwise certain alternative of what has been shown by reliable statistics to be a fatal termination. There have now been between twenty and thirty successful operations for typhoid perforation, and it has been found, as the result of experience, that twelve hours after the occurrence of the lesion is the most favourable time for operating, when the patient has rallied from the shock, and before general septic peritonitis has set in. At a later period than this the chances of success grow less, and after twenty-four hours the prospects are practically hopeless. The lesson to be gained from the study of the application of surgical principles to perforation of the stomach and of the intestine broadly points to the fact that while in the majority of cases the physician must continue to exercise his valuable influence over what is legitimately his domain, he can no longer in the interests of human life draw a hard and fast line between those cases formerly recognised as purely medical, and those which by the light of our increased knowledge have become justly surgical.

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NOTES ON ADENOIDS

By ALEXANDER FRANCIS, B.A., M.B., B.C.
CANTAB., SHEERWOOD, BRISBANE.

MY object to-night is more to start a discussion upon post nasal adenoid hypertrophy than to attempt to give you a paper upon this somewhat overdone subject. In fact I hope to touch chiefly upon controversial points. In spite of all that has been said and written about adenoids, our knowledge of their true significance is still elementary. About 18 months ago I was permitted to read a paper before this society, in which I tried to point out how far reaching and general was the effect of adenoid hypertrophy upon the public health by the influence it exercised upon the development, both physical and mental, of children, in addition to its special direct bearing upon diseases of the ears and nervous system. Extravagant as many of the statements were then considered, further experience has not only demonstrated the truth of the claims I then made, but added other diseases to the list upon which adenoids have a decided influence. Although there are differences of opinion as to the manner in which this adenoid hypertrophy produces its effect, I think no one now has any doubt about the beneficial results that can be obtained from its removal in diseases of the ears, in susceptibility to catarrhal conditions, in convulsions and various nervous disorders, and in general development. What I want to deal with chiefly to-night are the indications for operation. I have frequently been accused of having advocated wholesale operative interference, although in the paper already mentioned I gave it as my opinion that "to operate in cases of adenoids where there are no symptoms either as regards the ears or general health is not only unnecessary but unjustifiable, a practice to be condemned as much as the indiscriminate cutting of tonsils whenever slightly enlarged. No good object is to be gained by it, and nothing is so likely to bring the operation into disrepute, and so prevent great good from being done in innumerable deserving cases." Whereas I adhere to all that I have said in favour of operating, I feel more strongly than ever now the necessity of restricting the operation to those cases where the symptoms demand it. The public seem to think that adenoids have come down upon us as an epidemic like dengue fever, and that if a child has "this growth," as it is called, it must be removed or some terrible unknown trouble will descend from heaven. It is amusing to get a view of the ordinary parent's

mental picture of "this growth," as it is likewise to watch their faces when they are informed that in all probability they too and most of their acquaintances had the same complaint in childhood. I am afraid that many of us are apt to be led away by brilliant results, in certain cases, into giving adenoids an undue importance in the causation of disease. I have seen very varied instances of this. Quite recently I saw a girl whose only complaint was a weak toneless voice. I found the vocal cords were poorly developed, and there was a general atonic condition of all the laryngeal muscles. Examining the nose and pharynx I found the whole tract was in an atrophic condition. This was particularly well marked in the nasopharynx. Two large fossæ above the posterior choanæ of the nose marked the spot where the adenoid pad is usually so well developed. Upon enquiry I discovered the child had suffered some years previously from diphtheria and diphtheritic paralysis. I remarked that it was refreshing to see a throat for once that had no slightest trace of adenoids, when I was informed that two doctors had independently stated that the hoarseness was due to adenoids, and in each case the child was only spared the operation by the mother's dread of chloroform. Another case was a child who could not pass water. Probably arguing conversely from the association between adenoids and nocturnal enuresis it was urged that the child's adenoids be removed, but circumcision was found to be more efficacious. Again, I do not know which is the sadder sight, a purulent otorrhœa that could have been cured by the opportune removal of adenoids, or a similar condition as the result of an unnecessary operation. In dealing with the question of the advisability of operating I hold there are two classes of cases met with. In the one the operation is imperative, in the other conditional. The first class includes convulsions, especially in children after babyhood, and all grave conditions of the ears. In these there can be no question of delay or exception. The second class includes all other cases. These have to be decided upon on their merits. If the symptoms are sufficient to justify an operation, let it be done by all means. No hard and fast rule can be laid down as to when the symptoms are sufficiently grave to demand the operation. Experience is our best guide. Most doubtful cases—those which I call on the border line—declare themselves one way or the other in a short time, and in such cases as there is no urgency we can safely afford to await events. I know of many cases which now present no symptoms of adenoids, although

at one time it seemed highly probable that they would need operative interference. Thus I do not consider that every case of slight temporary deafness should be operated upon *per se* at once. In considering this question let each one remember that in all probability he himself had adenoids, and let him further bear in mind that there is a strong antecedent probability of some recurrence of the hypertrophy, however well the operation be performed. Although, as a rule, the recurrence does not seem to have any further harmful effect upon the disease for which the operation is done, be it ear trouble, convulsions, enuresis, etc.; still if the operation be performed merely because adenoid hypertrophy be present, the result cannot be considered satisfactory if there prove to be as much, if not more, overgrowth after the operation than there was before. I know of several instances where a child presented no symptoms of the presence of adenoids until after an operation for their removal. C. A. Parker, one of the surgeons of the Golden Square Throat Hospital in London, and an authority upon adenoids, when writing to me some time ago, said: "The importance of post nasal growths and their removal will always be discredited by many, for the reason that every doctor thinks the operation simple, and that he has effected his object when the operation is finished, whereas he has hardly begun to remove the growths, and this of course means disappointment to all concerned. Personally I think it is extremely difficult to make sure of leaving a clean smooth vault, and the more I do the more I feel this." To show that there is no doubt about recurrence I have brought down a specimen. The late owner of these growths was a girl who consulted me on account of marked deafness. I could get a good view of the post nasal space, and found a large mass of adenoid hypertrophy, which I said must be removed. The mother took the girl elsewhere to have the operation performed, but returned in a couple of months because the child was deafer than ever, and now snored, which she did not do before. Upon examination I found she had a much larger adenoid growth than before the operation, and this large quantity is some of what I removed. This case is important to my mind as well exemplifying the necessity of choosing a good day and getting the surroundings as favourable as possible for the operation. Nasal and post-nasal wounds will not I find heal quickly in moist cold weather, and one of the chief objects to be aimed at, in order to avoid recurrence, is to get the raw surface to heal as quickly as possible.

The case I quoted was operated on on a very wet day, away from her home, and to this cause I attribute the great recurrence which took place. There is yet another point to be borne in mind in deciding upon the necessity of operating, namely, the possible error of overestimating the amount of overgrowth present when the finger is passed behind the child's palate (a procedure that ought seldom to be necessary). The moment the finger touches the fauces the palate becomes so firmly pressed against the pharyngeal wall that the finger is apt to push up a fold of palate before it, which can be mistaken for a large adenoid mass; or if the finger gets fairly into the vault the eustachian cushions might mislead one. With a struggling child it is not always so easy as it reads to first make out the septum and then systematically explore the various parts. With regard to the operation, we each have our own methods, and I think we should use that one which we find best attains the object we have in view, namely, the effective removal of the growths with the least loss of blood and the least possible disturbance of the parts. Personally I prefer a particular modification of Loewenberg's forceps—with these I remove the greater part in three or four pieces, and then a few sweeps of a ring knife as a rule leaves a perfectly smooth surface. Should there be any pieces left or inaccessible to these methods, I scrape them down with a bare finger nail. The operation only lasts a few moments, and there is comparatively little bleeding and no injury to the surrounding structures. The ring knife alone produces a good result, but I must say I dislike the artificial finger-nail for three reasons. Firstly, I maintain that with it on your finger it is impossible to feel accurately where you are scraping, because although the nail may not project beyond the finger tip, still the back of the finger must be towards the adenoid hypertrophy on the pharyngeal wall, and that part of it is altogether protected by the metal nail. In the second place, the bleeding is unnecessarily and, in some cases, harmfully severe. Thirdly, the debris cannot be properly removed, but is apt to lodge in the nares, and so necessitate frequent douching and retard convalescence. With regard to the position in operating, I think it is well to have the head lowered, but it is important to have it on a gentle slope, and not hanging sharply over the edge of the table. The danger from that position from the stretching of the neck and the possible laryngeal spasm is greater than having the head on the table with the shoulders slightly raised. Undoubtedly the chief danger arises

from the blood during, and immediately after the operation. It is well to see that the head is kept on one side until the patient has thoroughly recovered from the effects of the anæsthetic, so as to allow the free escape of any blood, and to avoid the possibility of choking in case of vomiting swallowed blood.

The question of anæsthetics has always been a troublous one. Ether is contraindicated on account of the venous congestion, and there is a great prejudice against chloroform in some quarters. Hinkel in an article in the *New York Medical Journal*, of October 29, 1898, says that "the statistics shew an exceptionally high mortality from chloroform anæsthesia in the operation for the removal of lymphoid hypertrophies of the pharynx. The observations of the Vienna pathologists shew that sufferers from adenoids frequently belong to an abnormal constitutional type that has been found peculiarly susceptible to chloroform narcosis. In view of the statistical and pathological data presented, the general use of chloroform in the operation for hypertrophied tonsils and naso-pharyngeal adenoids is inadmissible." Notwithstanding this statement, I believe chloroform is as safe in this as in any other operation so long as proper care be taken in the control of the bleeding. The necessity of care has been deeply impressed upon me by three cases. Two in England and one in my own practice here. In each of these cases death, which seemed imminent, would have been ascribed to chloroform syncope, whereas in reality the trouble was blood in the larynx; and all anxiety was relieved the moment this was removed. In all the cases the danger was not supposed at the time to arise from interference with respiration, for the patients continued to perform respiratory movements. One case was striking. Amyl nitrite, ether, and the application of the battery to the præcordial region, were employed without effect when one of the staff of the hospital, who was standing by picking up a sponge wiped a great clot of blood from the larynx which immediately dispelled the alarming symptoms. In America ethel bromide is chiefly used, and the advantages claimed for it are (1) laryngeal reflex very probably persists, and any blood or tissue entering the larynx is promptly expelled; (2) the operation can be done in the sitting posture; (3) nausea and vomiting are rare, and the patient experiences but little discomfort after the operation. As a matter of fact, in a large proportion of cases in children over six years of age it is quite unnecessary to give a general anæsthetic.

With the aid of cocaine and a little patience one can thoroughly remove the overgrowth in three or four sittings, at intervals of ten days or so, without pain. The result is often more satisfactory, because one goes on until there is no sign of hypertrophy left; whereas under a general anæsthetic one is expected to effect a complete cure by a single operation.

PROCEEDINGS OF BRANCHES.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE regular general meeting of the Branch was held at the Royal Society's Room on Friday, 28th July, 1899, Dr. E. T. Thring, President, in the chair. Present: Drs. Quaife, Chisholm, Tidswell, Knaggs, O'Reilly, Kirkland, Spencer, Reid, Crago, Lloyd, Gordon MacLeod, Manning, West, Flynn, Worrall, Hankins, Hall, Barrington, Bowman, Macdonald Gill, Littlejohn, Maitland, Armstrong, R. S. Bowker, S. H. Hughes, Parker, Arthur, Todd, Gordon Craig, Goode, Gledden, Angel Money, Clubbe, Martin, Sinclair Gillies, Abbott, Coutie, Hinder, Ludowici, Bennet, MacCulloch, Mills, O'Gorman Hughes, Ashburton Thompson, Binney, and McCarthy.

Visitor: Dr. Dunbar Hooper, of Melbourne.

The minutes of the previous meeting were read and confirmed.

New Members: Dr. E. J. Bray, Wingham; Dr. F. W. Simpson, Hill End; Dr. C. A. Müller, Sydney; Dr. L. W. Harvey, Manly; Dr. B. Belli, Walgett; Dr. G. H. Broinowski, Hay; Dr. F. H. Gaden, Grenfell; Dr. George Allan, Summer Hill.

The HON. SECRETARY read a circular from the Marrickville Municipal Council with reference to the notification of tuberculosis and comments on the same by the Editor of the *Australasian Medical Gazette*.

Dr. POCKLEY, in commenting upon Dr. Hughes' paper (at the June meeting) said: With reference to the pathology of tabes, I understand neurologists are inclining to the opinion that tabes begins as a primary degeneration of groups of peripheral neuritis. At any rate it is beginning to appear probable that in the eye the atrophy begins, not in the nervehead, but as a granular degeneration of the ganglion cells of the retina, and travels back along the centripetal axis cylinder processes. There is a form of optic atrophy occasionally met with, after profuse or repeated hæmorrhage, most frequently uterine but sometimes surgical. Hitherto the pathology of this has not been explained, but Ward Holden has recently investigated it in animals, and finds that after profuse bleeding the first change in the eye is a granular degeneration of the ganglion cells of the retina, attributable to anæmia, and that the degeneration travels back along the medullary sheaths of the axis cylinders through the optic nerves, chiasms and tracts. A similar process follows poisoning by methylated spirits.

Dr. GLEDDEEN exhibited a patient suffering from dislocation of both bones of the forearm backwards on the humerus, of three years standing.

The PRESIDENT called upon Dr. S. H. Hughes to move the resolution for the alteration of Article 28 in the Articles of Association of the N.S.W. Branch of the British Medical Association.

Dr. S. H. HUGHES, in introducing the alteration to Rule 28, which stood in his name on the business paper,

said he had given the subject much consideration during the last two years, and had intended making the suggestion last year, but had neglected to do so. He had been a member of the British Medical Association for ten years—the last four years belonging to the New South Wales Branch—and had been struck with the fact that the same men, with very few exceptions, were elected to the Council year after year, and this was what he objected to. He had nothing whatever to urge against the existing Council; it had worked well, and merited the best thanks of the Branch. Of course those in favour of matters remaining as they were would say that the affairs of the Branch were in good hands, and therefore no change was desirable; but he objected to the composition of the Council remaining the same from one ten years to another. At present the town members practically ruled in this matter, country members either taking little interest in the elections or instructing their Sydney brethren to vote for them. The mere fact that the Council consisted of the same men year after year detracted from the interest that should be taken in the proceedings of that body. He therefore moved that,—“All members of the Council to retire annually, and (subject to Article 42) one-third of them to be ineligible for re-election until the expiration of two years. For the first two years following the passing of this Rule, the retiring four Councillors shall be determined by ballot, and thereafter the four senior members to retire.” This rule to come into force at the next election.

Dr. O'REILLY seconded the resolution. He had been associated with the Society since its inception twenty years ago, and he might observe that the Branch had been a success from the very first. Perhaps more elasticity would be desirable, and might be imported into the Council if the proposed alteration were adopted.

Dr. F. H. QUAIFFÉ wished to point out before the motion was put to the vote that there was a large number of members who had only joined the Society of recent years, and, of course, such could not be as well acquainted with the working of the Branch as the older members. At the end of the present year he would be retiring from the Council, and therefore he spoke from no personal motive. He did not think it desirable that there should be any radical change in the Council; rather he advocated a steady continuity in its composition. The Branch had gradually developed into a large business concern, consequently the matter called for the most careful consideration before any change was made. It would be as well perhaps to allow the question to stand over for deliberation. It was absolutely essential that factitious changes from year to year should not take place. The Hon. Treasurership was a most important post, one that few men were capable of discharging. The speaker cited instances that had come under his personal knowledge where Hon. Treasurers had, through mistake or through being temporarily disabled by illness from attending to their duties, involved the Society in heavy loss. Therefore, while countenancing to some extent the infusion of new blood, he strongly counselled extreme caution in permitting alteration in the personnel of the Council.

Mr. HANKINS said that the present discussion might be regarded as a healthy sign, as showing that members were taking a more active interest than formerly in the affairs of the Society. Although he did not share the views of the mover of the resolution, he wished it to be understood that he was not now speaking officially as a member of the Council. His principal object in rising was to submit to the members a chart of the

different Councils holding office from the inception of the Branch in 1880—twenty years ago—thinking it might be of use in the discussion, as it indicated the length of time different members had held office and the changes which had taken place from year to year. During this period forty-two members had held office, some for long periods, and these latter were the men who could be least spared. The changes had been sometimes four or five in the year, but the average for the whole period was two-and-a-half per annum. It is thus evident that, by natural causes, an influx of new blood is constantly taking place, and it is doubtful if any advantage would be gained by the more rapid change such as is aimed at by the motion before the meeting. It must be borne in mind that all members of the Council retire every year subject to re-election, that the election is by ballot, and that proxy papers are not made use of. It is stated that the election is practically carried by the country members, who are not aware of the qualifications of the new aspirants for office, and, because they are unable to attend the meetings, are indifferent on the subject of the composition of the Council. The answer to this is that the country members are much more directly concerned in the Council than are the Sydney members, for the latter, whenever they have a grievance or an ethical point to be settled, are able to bring it forward at a general meeting, whereas the former are in the habit of writing directly to the Council for their decision. From the fact that the country members are apt to re-elect old members, we may assume that they are in the main satisfied. Before this proposed new rule could be made workable it would be necessary to exclude from its action the President and Vice-President elect, the Hon. Treasurer and Secretary, and the three members of the sub-committee for the management of the *Gazette*—seven individuals, or half the number of the Council. If of the remaining seven four or five were compelled to retire, and say two more failed to be re-elected from what we may term natural causes, it would effectually prevent any of the junior members ever reaching the Presidential chair. Dr. Hughes had nothing to say against the present Council, but, without giving any reasons, expressed his opinion that more rapid changes in its “personnel” would be desirable. If it could be urged that a seat on the Council afforded educational advantages which should be shared by as many as possible of the profession, as is the case with some hospital appointments, there might be some excuse for his motion, but in the case under consideration the only matter which need concern us is the welfare of the Branch and the safe conduct of an important business—he referred to the *Gazette*—and these ends would be best served by a continuity of service on the part of men whom the members consider best fitted for the post, subject only to such changes as take place naturally at the annual elections.

Dr. CLARENCE READ did not wish to reflect in the slightest degree on the past or present members of the Council; the Branch won the position it now held through the efforts of those gentlemen. This age, however, was a progressive one, and the proposed alteration was not a radical or a drastic one. Bearing in mind that it only provided for the retirement of one-third of the members, it might be termed a very moderate measure. No doubt the positions of Hon. Secretary and Hon. Treasurer were important offices, but he begged to point out that the present Hon. Secretary, Dr. Hankins, had had no previous experience in that capacity, and yet, judging by the efficient manner in which he discharged the duties, it was evident that such a post could be creditably occupied with a brief

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY meeting was held at the University, on Thursday, 27th July, 1899. Present:—The President (Dr. Marten), Drs. Todd, Symons, Poulton, Christina Goode, Swift, Chapple, Watson, Morgan, Fischer, H. Evans, A. E. Wigg, Gregerson, J. A. G. Hamilton, G. Hayward, Harrold, A. A. Hamilton, Cavenagh-Mainwaring, W. T. Hayward, Giles, Gault, London, Michie, and the Hon. Sec. (Dr. J. B. Gunson). The following living exhibits were shown:—

Dr. TODD: A Patient after removal of vermiform-appendix, also the appendix.

Dr. LONDON: Case of Gastrostomy.

Dr. POULTON: Excision of Elbow.

Dr. HARROLD: Case of Pityriasis Rubra.

Dr. POULTON shewed a new "Centrifuge with accessories."

Professor WATSON demonstrated several pathological specimens.

1. Deciduoma malignum of left tube from a 3-para, *æt* 30, who twice miscarried after curettage two years before abdominal section for a supposed ectopic pregnancy. The left adnexa and meso-sigmoid are substituted by new growth and blood clot. The superior hemorrhoidal and common iliac veins are surrounded by the growth. As it was found impossible to have shifted the tumour, the patient was sewn up and the operation abandoned. (Dr. Way.)

2. Hemorrhagic sarcoma developed between the rectum and bladder from a nullipara, *æt* 46. The growth, which fluctuated, was cut into from the vagina, and a large quantity of blood clot and broken down tumour removed, and the cavity plugged and washed out daily, patient dying a month later of exhaustion. The new growth was just beginning to involve the left utero-sacral fold.

3. Burrowing or dry form of utero-pelvic hydatid from a multipara, *æt* 58. It pushed up the bladder, absorbed the cervix, and effaced the left broad ligament. Another fist-sized tumour stuffed with grape skin vesicles was adherent to the abdominal wall, sigmoid flexure, ileum and omentum, with which latter it had formed a *caput medusæ*. The abdomen was opened expecting to encounter the moloch horridus type of uterine fibroid, and it was only after the smaller tumour had been dissected away that the real condition was revealed. The right round ligament was traced back to where it merged into the tumour and cut adrift so as to expose and tie the ovarian veins and artery and the uterine artery at the pelvic wall. The bladder was now shaved off the tumour till the right ureter was sighted; the operator now turned his attention to the alternate (left) side, and secured the ovarian vessels by splitting the left blade of the descending meso-colon. The anterior division of the internal iliac artery was secured by drawing on the obliterated hypogastric, thus rendering the field bloodless. The uterus and incorporated tumour were now swept out of the pelvis, with the exception of a sacculated cup of leather-like capsule, the removal of which would have imperilled the left ureter and rectum. The septa or spurs were cut away, and the resulting cup cleared of all visible vesicles, and its edges closed over a gauze tampon, one end of which was pushed through the patulous os by a Doyen's clamp. Seven interrupted inversion sutures of thick tendon were used, and the suture-line covered over by tethering the redundant bladder serosa to some rectal adhesions with fine wallaby tendon. Within six weeks, the tendon sutures closing the segment of cap-

sule, some hydatid vesicles which had been overlooked, and some sloughy fragments of capsule and a portion of the gauze-plugging which had eroded and strayed, were all evacuated through the gaping os, which finally contracted into a stellate pit, after which the patient went out cured.

4. Macerated three months' foetus from a two-para, *æt* 26, who had been ill three months, and subjected to tapping, P.V., in the country, when blood-stained fluid permitted a correct diagnosis to be arrived at. Nevertheless, three weeks elapsed before patient consented to come to town for operation. As encapsulation was considered certain, the vaginal route was chosen, and the foetus, bloody fluid, clot, and portions of chorion removed by posterior colpotomy. The cavity was lightly stuffed and sluiced out daily for four weeks, during which time it became septic, and the patient's life in danger. Finally, the remains of the stinking chorion were sluiced out, when immediately patient began to convalesce, and is now out of bed (seven weeks). I saw Dr. O'Sullivan open the abdomen and eliminate foetus, blood clot, and tube in a similar case, with a much more rapid convalescence, and equally favourable final result. (Dr. Way.)

5. Twisted right ovarian pedicle dissected to show the feasibility of removing tubes and ovaries (but not broad ligament) without a ligature. The arterioles concerned cease to bleed when pinched with artery clips such as those used by Professor Terrier, which I hand round for your inspection. (Professor Allen.)

6. Cystic parauterine myomata, the largest of which simulated an ovarian cyst and the smaller the bladder. From a nonipara, *æt* 47. Two months before operation the patient had been tapped in the country and a quantity of clear saliva-like fluid removed. In the belief that the growth was ovarian, 40 oz. of inky fluid (result of blood effusion from former tapping) were drawn off as soon as the abdomen was opened. The tumour, which weighed 7 lbs. without the contained fluid, was then delivered, and was found to be connected with the right uterine cornu, the right fallopian tube immensely lengthened completely encircled it. The flattened (right) ovary projected like a satellite tumour from its surface. In other words, the uterine cornu had undergone a partial rotation which rendered removal of the mass with a segment of the utero-ovarian vascular arch extremely easy. The smaller tumour, which mimicked the bladder, was then shelled out through the resulting breach in the broad ligament, which was then closed with tendon. The uterus, which was pink, bossy, oversized and succulent, was left behind with the adnexa of opposite (left) side. Worrall and Thring advocate side-to-side hysterectomy as the easier and better operation. The patient recovered, which is the principal thing. (Dr. Marten.)

7. Thinned dilated contorted closed right tube from a childless married woman, *æt* 25. It is stuffed with a putty-like mass containing cholesterolin, etc. A small subperitoneal collection of a similar substance existed close to the left cornu, where no tube or ovary were demonstrable. As Michael Forster would say: "The whole subject requires further elucidation." (Dr. Lendon.)

8. Uterus embedded in which is the silk-worm gut of a ventrifixation performed two years previously to vaginal hysterectomy for incipient cancer from a multipara, *æt* 40. (Dr. Way.)

9. Stomach of a man, *æt* 50, who lived a week after pylorotomy by the old method of Wöfler. Leakage occurred in the angle of junction of the longitudinal gastric with the circular gastro-duodenal suture lines. (Dr. Smith.)

10. Syphilitic disease of pylorus and transverse meso-colon and vesiculæ seminales from a man, *æt.* 56, whose abdomen was opened with a view to gastro-jejunostomy. The transverse meso-colon is represented by a thick slab of tough, pliant tissue, in which the vessels are embedded, and the glands unenlarged. Dr. Chas. Ryan once closed the abdomen in a similar case, and had the gratification of seeing the patient well a few years later. (Dr. Hamilton.)

11. Ring-cancer of sigmoid with portion of sigmoid meso-colon stuffed with glands. From a gentleman, *æt.* 63, who suffered from obstruction, and was operated on after the method followed by Moore, of Melbourne. Two chicken bones were found caught under the distal edge of the ulcerated zone which Professor Allen says is inseparable from such growths. But for his instruction in such matters, the infected glands would have been missed by the operator. Patient says he has quite lost a gurgle which he avers he has felt since his youth, in the left iliac fossa. (Dr. Way.)

12. Pyelitic kidneys, &c., from a man *æt.* 60, who suffered from a traumatic stricture of old standing. The suppurative ureto-pyelitis, which killed him, might have been averted, had he not persistently refused surgical aid. (Dr. Poulton.)

13. Uretal concretion from a boy, *æt.* 17, afflicted with ectopia vesicæ. An abscess formed three years ago, which resulted in a common cloaca for both ureters. (Dr. Strang, an.)

14. Superior cervical ganglia and attached superior cardiac nerves from a maiden lady, *æt.* 33, afflicted with exophthalmic goitre. The immediate result has been most encouraging, but we must wait six months to see whether the effect is permanent. No ligatures were necessary; the stitches were removed on the morning of the fourth day. The small occipital nerve was inadvertently divided on one side. (Dr. Way.)

Dr. POULTON exhibited a woman, aged 42, showing result of excision of elbow ten weeks previously for ankylosis in extension after fracture received eighteen months back. There was free flexion and extension, and good rotatory movement of the forearm. The patient said she was able to wash clothes and wring them out.

Also: 1. A specimen of carcinoma recti removed by excision. The whole circumference of gut invaded to 4 in. from the anus.

2. Lymphosarcoma from caput cœcum coli, removed by excision of portion of gut. Appendix from the same case. These cases to be described in a subsequent paper.

3. Hydatid of pleura, removed by incision.

4. Oxalic acid calculi, removed by nephrectomy, in case simulating tuberculosis of kidney.

5. Hydatid of abdominal cavity.

Centrifuge (Beck's) specially adapted for practitioners.

Minutes of last meeting read and confirmed.

Ballot.—Spencer Smithson Dunn, M.B., C.M. Aberd., was elected a member of the Branch.

PAPERS.

Dr. A. E. Wigg read his paper "The Injection of Saline Solution in Puerperal Cases" (see page 324).

Dr. SWIFT read "Notes on the use of Saline Solution Injections" (see page 317).

These papers were then discussed by Drs. LENDON, POULTON, J. A. G. HAMILTON, HAYWARD, HARROLD, CAVENAGH-MAINWARING, MARTEN, Professor WATSON, and the writers replied.

Dr. J. A. G. HAMILTON read a paper on "A case of Serum Treatment of Puerperal Septicæmia" (see page 331). To be discussed at the next meeting.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

OTAGO SECTION.

MEETING held June 28th, 1899. Present: Dr. Barnett (President, in the chair), Drs. G. P. Brown, Wm. Brown, Davies, De Lantour, Fulton, W. M. Macdonald, McKellar, O'Neill, Roberts, and Wm. Fitzgerald.

Dr. FULTON, in accordance with previous notice, moved—"That the hon. secretary of this Section be notified of each case of infectious disease occurring in the city and suburbs, and that the editors of the daily papers be requested to publish such information in their respective journals from time to time when so reported."

Dr. FULTON explained that he wished to acquaint the public with the numerous cases of infectious disease occurring in the city and suburbs which at present pass unnoticed, with a view to stimulating the health authorities to take measures to improve the sanitation of the districts affected.

Dr. DAVIES seconded the motion.

Dr. BROWN moved, as an amendment, "That this Association, having had its attention called to the imperfect way in which the duties imposed by the Public Health Act are carried out by the Municipal Councils as Local Boards of Health, with regard to infectious diseases, strongly urges on the Dunedin City Council the advisability of appointing a health officer for the city, and also urges on the suburban boroughs the desirability of joining with the city in such appointment."

The amendment was seconded by Dr. ROBERTS, and carried.

A deputation was then appointed to wait on the City Council and lay this matter before them.

A number of interesting clinical cases and pathological specimens were then demonstrated by various members.

Dr. MCKELLAR showed a case of old standing united transverse fracture of the patella with fully four inches of separation between the fragments. The patient was a labouring man, who suffered singularly little disability from his condition, being able to do an ordinary day's work without trouble.

Dr. BARNETT and Dr. ROBERTS each showed a case of congenital double dislocation of the hip joints, the first a child of two years of age, illustrating the deformity in its earlier stage before the child had done much walking; the second, a child 12 years of age, in which the dislocations were very marked.

Dr. BARNETT gave a short description of the etiology, symptoms, and treatment of these rare and interesting cases.

Dr. WM. BROWN described a case on which he had operated with fairly satisfactory results. In his case he had been struck by the great lengthening of the ligamentum teres.

Dr. ROBERTS showed and described a case of pseudo-hypertrophic paralysis occurring in a girl 10 years of age.

Dr. WM. BROWN showed about a hundred calculi, all curiously spiculated, which he had removed by supra-public lithotomy.

Dr. DAVIES showed two calculi about the size of cherries, removed by median lithotomy; and a beautiful sparkling mulberry calculus, removed by supra-public operation, from a lad aged 16. Dr. Davies read notes of the cases, which proved full of interest.

Dr. DAVIES exhibited and commented adversely upon a piece of very common glazed calico, which had been sold by a druggist as waterproof material.

Dr. BARNETT exhibited for Dr. Murray-Aynsley: (1) Portions of a wax bougie, a home-made article, removed from the bladder of a man by supra-pubic operation. (2) The claw of a crayfish, which had led to a thoracic abscess, and was subsequently expectorated. Dr. Murray-Aynsley's notes on these unusual cases were read and highly appreciated. Dr. Barnett stated that Dr. Murray-Aynsley had kindly given him these valuable specimens for the Museum of the Medical School.

Other specimens shown were: A small piece of grass, removed from a submaxillary abscess; shown by Dr. Davies. A number of small vesical calculi, like melon seeds, removed by supra-pubic operation during the course of prostatectomy, the stones being lodged in the post prostatic pouch; a trephine disc from the occipital bone, showing the marked inequality in thickness; a mass of dead bone, including the greater part of the upper jaw, the result of syphilitic necrosis; these three specimens all being shown by Dr. Barnett.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting of the Branch was held in the rooms, Collins Street, on Wednesday, July 19th, at 8 p.m. Present: The President (Dr. Kenny, in the chair), and Drs. Cuscaden, Kent-Hughes, F. W. Morton, Buchanan, Springthorpe, Black, C. Ryan, A. V. Anderson, and J. R. M. Thomson. Veterinary Surgeon Desmond was present as a visitor.

The minutes of the previous meeting were read and confirmed.

Dr. C. RYAN shewed a "Case of Sarcoma of the Great Wing of the Sphenoid" in a lad of 16, which he had removed early in the year after laryngotomy and ligature of the external carotid, with an exceedingly good result as regarded deformity and condition of the eye. Members generally expressed their congratulations.

Dr. C. RYAN then read his paper "Notes on Operations for Perforation in Typhoid Fever, etc. (See p. 334.)"

Dr. SPRINGTHORPE agreed very largely with Dr. RYAN. In hospital practice, however, it was the exception to get cases that perforated early, his cases generally were combined with hemorrhage, or very late in the disease, and the conditions were not very favourable for operation. The only recent case in which an operation had seemed called for was in a boy who perforated during a relapse, and his only perforation was 200 inches above the ileo cæcal valve. From the medical point of view also, the local condition of the bowel, and the possibility of other perforations from the manipulation or otherwise, seemed to him to suggest the wisdom of leaving an opening for drainage in any but the most favourable cases. Again, the diagnosis was difficult in some of the late cases, and the strain of an unnecessary operation might prove fatal. Still, it must be admitted that perforation without operation was practically fatal, and operation might certainly save some at least. The early diagnosis depended very largely upon constant watchfulness, and the resident staff would have to direct special attention in that direction.

Dr. ANDERSON had only seen one case of perforation get well with medicine out of 900. The perforation showed itself by sudden severe pain in the right iliac region, with rise of pulse and fall of temperature, and absence of liver dulness, especially anteriorly; two-thirds could be diagnosed in 24 hours, and in some 30 per

cent. there was hope from an operation. *Post mortem* shewed that they were almost always within four feet of the valve, and it was more likely that there was an unsuspected perforation than none found on operation. He thought that operative results would approach those for perforating gastric ulcer—40 per cent. recovery.

Dr. BUCHANAN congratulated Dr. Ryan. In operation was the only hope. Death might be due to carelessness in the after treatment of the anæsthesia. The patient being left to attendants vomiting whilst on his back, and the vomit entering the larynx. The patient should not be allowed to be taken back to the ward until a qualified attendant had pronounced him fit. The hypodermic of morphia after the operation added to the danger.

Dr. CUSCADEN had seen ten cases of perforation in all, the cases were mild, and the attack sudden and unexpected. Operation gave a certain amount of chance.

In reply, Dr. RYAN thanked the members for their appreciative criticism. Perforation seemed commonest in mild cases, and most of them were legitimate cases for operation. He preferred the incision through the centre. In 70 per cent. the perforation was single. He admitted the value of the drainage tube, though it had risks of its own. The most favourable time to operate seemed about twelve hours after the perforation. It was practically hopeless if delayed 24 hours.

Mr. DESMOND then shewed a variety of interesting pathological specimens from horses and cows, also evidence that his prepared kangaroo tendons had remained effective in tying the carotid of a dog for a period of over three months.

The meeting then adjourned.

PROPOSED ASSOCIATION FOR THE PREVENTION OF TUBERCULOSIS IN MELBOURNE.

A LARGELY-ATTENDED meeting of medical men was held in the Hall of the Medical Society on Wednesday evening, July 26th, to take steps to form an Association for the prevention of the spread of tubercular disease. Sir Thomas Fitzgerald occupied the chair. There were also present: Drs. Springthorpe, J. Williams, Argyle, Grasswell, Kenny, Hamilton, Murray Morton, Gault, Nyulasy, Norcott, J. Sutherland, Meyer, Howard, C. Ryan, J. P. Ryan, Robertson, P. Sutherland, Agnew, Buchanan, Mollison, Syme, Duncan, Brett, Jamieson, Helen Alexander, Maudsley, Keogh, Bage, Professor Allen, Embley, Scott, Newman, Gardner, Balfour, Strong, Bennie, Kent-Hughes, Jones, McGibbon, Willis, J. R. Thompson, Fishbourne, McAdam, Hall Owen, Gray, Turner, Branson, Langlands, Daish, Stawell, and Merrillees.

Sir THOMAS FITZGERALD expressed his pleasure in presiding over such a representative gathering. All of them, whether physicians or surgeons, anatomists or bacteriologists, had the same feeling as to the terrible prevalence of tubercular disease, and its prevention was a matter in which they could and would all join hands with enthusiasm.

Dr. JAMIESON detailed the steps by which the movement had been started and carried on up to the present stage. As indicating the need for some such Association, he quoted statistics which showed that the average yearly mortality in Melbourne alone for the last three years was 960, or 211 per 100,000, as against 256 in Liverpool and 285 in New York, which he took as similar cities. Considering our advantages, our

should be still less, and, further, ours showed no appreciable decline, whilst both of theirs did, for the last fifteen or twenty years.

Professor ALLEN made a short statement as to the modes of dissemination. Separating the tuberculosis of children from that of adults, he considered it a safe generalisation to say that in the case of children the infection came with ingestion, the milk of cows with tuberculous udders being the chief vehicle, whilst in the case of adults, the dried sputum of a previous case was the source of the bacilli that produced pulmonary consumption, and that dwellings rather than ordinary air carried the poison. The main crusade thus should be against the bacilli in milk and sputum.

Dr. GRESWELL read a lengthy and elaborate statement as to the prevention of tuberculosis. In addition to the spread of information broadcast amongst the people and the improvement of general sanitary conditions, the special attention to infected dwellings, an attempt must be made to eradicate the disease in the lower animals, and skilled inspection of dairies and herds, with systematic examination of milk, became imperative. Legislation, based upon enlightened public opinion, must also be fostered.

Dr. SPRINGTHORPE sketched the work of the proposed Association. There was first the education of the public and the intelligent co-operation of patients, friends, working classes and clubs to be secured. There was next the hearty co-operation of the profession in practice as well as precept. And thirdly, there was the actual treatment of the patients themselves, so that they ceased to be foci of infection to others, and themselves were placed under the conditions most favourable to recovery. This included questions of climate, as well as finance, and would consist mainly in the establishment and maintenance of sanatoria in suitable districts. The work was one that would require and deserved the best efforts of all.

After a short discussion the following resolutions were moved and carried:—

1. That a Victorian Association for the Prevention and Cure of Tuberculosis be formed. (Moved by Dr. Jamieson, seconded by Mr. A. L. Kenny.)
2. That a public meeting be held in the Melbourne Town Hall to give effect to the proposal. (Moved by Professor Allen, seconded by Mr. G. A. Syme.)
3. That His Excellency the Governor be invited to preside. (Moved by Dr. Gresswell, seconded by Dr. Williams.)
4. That the following be appointed a Committee, (with power to add to their number) for carrying these resolutions into effect:—Sir Thomas Fitzgerald, Professor Allen, Drs. Argyle, Bage, Branson, Daish, Gault, Gresswell, Kent-Hughes, Jamieson, Kenny, Maudesley, McAdam, Murray Morton, Springthorpe, Stawell, Syme, Turner, and Williams. (Moved by Dr. Springthorpe, seconded by Dr. Turner.)

In speaking to the motions, Drs. Turner and Williams laid stress upon the necessity of not undervaluing the constitutional factor in tuberculosis, and Mr. Syme drew attention to the work which had already been done in the way of educating the Victorian public up to some appreciation of the whole question.

The meeting then adjourned, after the passing of a hearty vote of thanks to Sir Thomas Fitzgerald for presiding.

BALLARAT DISTRICT BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary Quarterly Meeting was held in Ballarat on Friday, July 28th. Present: The President (Dr. R. Scott), Drs. Champion, Lawrie, R. W. Lethbridge, Martin, Mitchell, McGowan, Palmer, Richards, and Usher. Apologies were read from Drs. Cussen, Affleck Scott, Jordan, and Miller.

Accounts amounting to 19s. 6d. were passed for payment.

Correspondence was received from the Superintendent of Police explaining that one Justice of the Peace had been averse to the roster being kept to distribute the *post-mortem* work equally among the medical men. After some opposition he had at last agreed to follow out the wishes of the police and of this Branch in the matter.

A letter was read from the widow of the late Dr. Wm. Gardner, offering to the Branch a large number of medical papers, reviews, and monographs. They were received, and a hearty vote of thanks passed to Mrs. Gardner for her valuable addition to the library. Thanks were also tendered to Dr. Pinnock for his kindness in securing the journals for us.

Ballot.—Henry Lawrie, M.B., B.S. Melb., Creswick; proposed by Dr. McGowan, seconded by Dr. Wilson. Harold Vincent Bennett, M.B., B.S. Melb., Ballarat; proposed by Dr. McGowan, seconded by Dr. Mitchell. Both these gentlemen were unanimously elected members of the Association and of the Ballarat District Branch.

In the absence of Dr. Affleck Scott, from indisposition, the Hon. Secretary read his paper upon "The Evolution of the Eye."

Dr. Wilson's "Notes of Cases Treated by Massage," were also read.

Dr. USHER then gave a demonstration of a quarter of an hour with the organic substances of the "British Pharmacopoeia," 1898, which was listened to with appreciative interest by the members present, and many questions were asked at the end, the answers to which threw considerable light upon the subject.

Dr. MARTIN read a "Report of a *Post-mortem* examination in a Case of Strychnine Poisoning." A good discussion followed on the question as to how and when the poison could have been taken, a point which seems to have been lightly passed over at the coroner's inquest.

Dr. MCGOWAN described a very simple device of his to demonstrate the fact of respiration in chloroform administration. He attaches a small fragment of cotton wool to the edge of each nostril by means of a drop of collodion. The slightest current of air causes this wool to move, and the feeling was expressed that the device would be of the greatest value in marking clearly every respiration, while the simplicity of it should make it of universal application.

Dr. J. Morison Gardiner was appointed to represent this Branch at the International Medical Congress to be held in Paris in 1900.

Dr. MCGOWAN exhibited the following specimens:—

1. Fusiform aneurism, about 2 inches long and 1½ inches in diameter, of abdominal aorta immediately above bifurcation, from a man *æt.* 60, with general atheroma. No symptoms.

2. Ovarian cyst (patient *æt.* 20), with small patch of papillomatous growth on inner wall of cyst. Contents clear fluid.

3. Spleen from man, *æt.* 56. Very tough, adherent everywhere. Patient had marked atrophic cirrhosis of liver.

4. Acute dilatation of left ventricle from ruptured compensation in a case of aortic regurgitation. Boy *æt.* 14, strong rheumatic history. Aortic valves thickened, and ring dilated. Mitral valves slightly affected also. Patient had typical Corrigan's pulse, and loud diastolic aortic bruit, and symptoms of a previous breakdown of compensation were aortic in origin. Case is interesting from fact that aortic valves were first affected, in all probability, this being the reverse of the general rule, that rheumatism mostly affects mitral valves primarily.

PROCEEDINGS OF OTHER SOCIETIES.

MEDICAL SOCIETY OF QUEENSLAND.

THE 149th general meeting was held on June 6th, 1899 in the Society's rooms. Present: Dr. Hardie (President), Drs. Lightoller, Bell, Smith, Scott, Bancroft, Gibson, Love, and Turner.

THE PRESIDENT made a statement regarding the negotiations with the Queensland Branch of the British Medical Association on the question of amalgamation.

DR. LOVE showed the case of hydrocephalus which had been exhibited some months back. The head had reached a great size.

DR. P. BANCROFT showed filariæ in the thoracic contents of mosquitos received from Dr. Thos. Bancroft, who had fed the mosquitos on the blood of a filarial patient. He also alluded to a case of much enlarged inguinal gland in a child, in which living adult filariæ were found after removal.

HOSPITAL ABUSE.

DR. GIBSON moved the following resolutions, of which the first was seconded by Dr. Turner, the second by Dr. Smith, the third by Dr. Bancroft, and the fourth by Dr. Lightoller. All were carried unanimously:—

"That this meeting affirms the opinion,—

'(1) That hospitals supported by the public purse and by private subscription are charitable institutions in which the sick poor have a right to expect the best medical and surgical advice available.'

'(2) That when other than impecunious patients take advantage of such institutions they exact charity not intended for them, and they occupy the time of those who are there to attend to the sick poor. They thus defraud the public purse, the private subscribers, the sick poor, and the hon. visiting staff. That the only exceptions to this conclusion are to be found amongst infectious cases, who cannot be isolated or attended to at home, and occasional severe accidents.'

'(3) That in large towns, where private hospitals either do or should exist, private or paying wards in a public hospital are unneeded, and lead to the abuse of charity.'

'(4) That these resolutions do not apply to country hospitals where an honorary medical staff is not available. In such cases "well-to-do" patients should be required to pay the hospital for their maintenance, and the hospital doctor for his services.'

DR. LOVE read notes of a "Case of Generalised Tuberculosis in a Child," probably due to the ingestion of tuberculous milk, giving an account of investigations with the tuberculin test on the dairy herd concerned, and of the condition of two cows which had died before the test was applied.

The 150th General Meeting was held on July 11th, 1899, in the Society's rooms. Present: Dr. Hardie (President), Drs. Wheeler, Bell, Bancroft, and Turner. Visitor, Dr. Dod.

DR. ESPIE DOD was nominated for membership by DR. TURNER, seconded by DR. HARDIE.

THE PRESIDENT made a further statement with regard to the negotiations regarding amalgamation with the Queensland Branch of the British Medical Association, and stated that the councils of the two societies had arrived at what he considered a satisfactory compromise. This met with general assent.

In the absence of any paper, DR. TURNER reported two cases, one of multiple hydatids of the peritoneum, for which he had operated, the other of stricture of the œsophagus following scarlet fever, and necessitating gastrostomy. These were generally discussed.

A Special Meeting was held on July 18th, 1899, in the Society's rooms. Present: Dr. Hardie (President), Drs. Gibson, Culpin, Carvosso, Bancroft, Bell, Wheeler, and Turner.

THE PRESIDENT explained that the object of the meeting was to deal with the question of amalgamation with the local Branch of the British Medical Association.

DR. TURNER moved,— 'That in accordance with resolutions passed at previous meetings, it is hereby resolved that on and after January 1st, 1900, the Medical Society of Queensland shall be amalgamated with the present Queensland Branch of the British Medical Association, and that all property belonging to the Queensland Medical Society shall become the property of the society formed by this union, which will be known as the Queensland Branch of the British Medical Association.'

DR. GIBSON seconded. Carried unanimously.

THE HON. SECRETARY then submitted a circular letter explanatory of this resolution, and inviting members not already belonging to the British Medical Association to join the parent Association. This was approved of.

THE 151st General Meeting was held on August 1st, 1899, at the Society's rooms. Present: Dr. Hardie (President), Drs. Francis, Dixon, Byrne, Hill, Orr, Gibson, Bancroft, Hopkins and Turner.

DR. ESPIE DODS was unanimously elected to membership.

DR. FRANCIS read a paper entitled "Notes on Adenoids." (See p. 338.)

DR. BANCROFT said he would like some guidance as to when operation was necessary. Was deep breathing during sleep a sufficient indication, or was it sufficient if the breathing was of this character only when the child had a cold?

DR. TURNER said that he had had cases where parents seemed anxious to have an operation which was entirely needless, and which he had refused to perform. He found it difficult to draw the line, where operation was or was not needed. He drew attention to cases of facial twitchings, reflex in character, simulating chorea but having no real connection with that disease, which were dependent on adenoids and cured by their removal. As an anæsthetist he favoured the hanging-head position plus a head-rest. In this position it was impossible for blood to enter the larynx.

DR. HOPKINS said each case must be treated on its merits. It was difficult to say when not to operate; personally he would prefer to operate perhaps unnecessarily rather than to leave a doubtful case alone. He always used the forceps first, then the curette, and

strongly objected to scraping with the curette or finger in the first instance, as the debris in this case, together with blood, found its way into the nasal cavities. He strongly objected to the hanging-head position, which caused congestion, and preferred to have the child lying on its side; bleeding was distinctly less in this position; it was easier to operate; and easier to clean out blood, &c. He did not believe that in the hanging-head position it was impossible for blood to enter the larynx.

Dr. LOCKHART GIBSON said he had listened with much interest to Dr. Francis' paper, with much of it he agreed, with some he disagreed. With regard to the ear conditions necessitating operation, indications of chronic middle ear trouble or of recurrent attacks of sub-acute or of acute middle ear trouble formed the chief. His routine practice was to examine the ears first in a case of suspected adenoids, and he obtained most valuable information from them. The most important information they yielded, however, could only be recognised by one constantly in the habit of examining drum membranes. There were often marked temporary alterations in the drum membranes, which did not of necessity result from the presence of adenoids—such as the effects of temporary eustachian blocking, and were of acute suppurative middle ear catarrh. The last being often due, even in children, to infection of the middle ear by the germs of a specific fever such as pneumonia or influenza, and without the presence of handicapping adenoids. The position of growths in the naso-pharynx he considers often much more important as regards their effect upon the ears than their quantity. A very small piece in a Rosenmüller's fossa may do more harm to the ears than a large mass in the general naso-pharyngeal space. He had for some years recognised two varieties of breathing as a result of adenoid obstruction in children. In one kind the children, not satisfied with breathing imperfectly through their noses, open their mouths. In the other kind the children insist on breathing, though imperfectly, through their noses, and keep their lips glued together. In his experience it is the latter variety who suffer more both in general health and in chest development. Regarding recurrence; in his experience it had been the exception, and not the rule. If thoroughly removed they recur in a very small percentage of cases. If imperfectly removed he should expect recurrence to be the rule. The case quoted by Dr. Francis where he had to remove so many growths two months after the patient had been operated upon by another medical man, he would look upon as an example not of recurrence, but of increase due to the irritation of an attempt at removal. It should, however, be remembered that adenoid is an unfortunate name. The hypertrophy is lymphoid, the mucous membrane which is full of lymphoid tissue is not removed, and the patient has demonstrated his tendency to lymphoid hypertrophy, therefore, a recurrence is possible after any operation. In his opinion a man whose finger can mistake the uvula, soft palate, or eustachian tubal prominences for adenoids should not attempt to operate on them, he lacks the rudimentary knowledge necessary. He had always maintained that no instrument should be used in the naso-pharynx unless guided by either the sense of sight or of touch. Though he employed Löwenberg's forceps when operating by the aid of sight; when operating by the aid of touch he employed a modification of Dalby's steel nail, which admits of the pulp of the finger feeling everything that the nail does. It seemed to him an ideal curette, and less clumsy than a curette worked by one hand and

guided in the naso-pharynx by the finger of the other hand. To be used perfectly it required practice like any other instrument, and it required to be made specially for the finger for which it was intended. He reminded those present that some years ago he had published and figured (in the *Intercolonial Quarterly Journal*) the position he adopted for operating under chloroform. In it, the head instead of hanging is supported two or three inches below the edge of the table by a movable shelf, with the vertical line of the face at right angles to the trunk and to the surface of the table. Though an apparently small modification of the hanging head position, he considered it important, and that it would be the position of the future. In it there is no obstruction to the venous return and as little bleeding as in any position. In fact, there is practically no bleeding unless anaesthesia is imperfect and struggling and retching occurs. After operating for adenoids bleeding to any extent has never in his experience occurred, except after imperfect removal. For instance, in one case operated upon under cocaine, and in which the operation was not completed at the first sitting, nothing indeed had seemed to him more noticeable than the fact that bleeding ceases as soon as the operation is completed, even in cases in which the bleeding had been more free than usual during the removal of the growths. In the position of hanging head, or of supported rectangular head, blood or debris cannot enter the larynx. It is impossible, as the larynx is at a higher level than either the nose or mouth. In an operation for adenoids, if blood or tissue enters the larynx, it must be the fault of the position chosen for the operation. He had had chloroform administered for him for removal of adenoids latterly, in the position of rectangular supported head, and formerly in the position of hanging head, at least 1000 times. He had had no fatalities. *He would refuse to operate on adenoids under chloroform in any but one of these two positions.* He always liked the patient to be well under the anaesthetic, but did not consider a slight pharyngeal reflex a disadvantage, unless it led to retching. On adults and children above 13 years of age he did not operate under a general anaesthetic, but used cocaine, the sitting posture, and a Löwenberg's forceps guided by the sense of sight. One, two, or three sittings are required, according to the amount of bleeding, which is apt to obscure the field of operation. With Löwenberg's forceps, guided by a rhinoscopic mirror, the growths can be removed with absolute exactness. He questions, however, whether the forceps when guided by the sense of touch can remove the growths as thoroughly as the finger-nail curette. Regarding the cases of facial spasm, some of which are almost examples of facial chorea, he had known them to result from and to be cured by removal of adenoids, but had also had similar cases apparently due to errors of refraction, and cured by the correction of hypermetropia. He looks upon them as cases of reflex spasm.

Dr. FRANCIS replied that as to operation, every case must be taken on its merits. Many cases were on the border-line, but if watched for a time a decision might be arrived at. In ear cases, if there are no structural changes in the drums, there is no great danger in waiting till the child is ten years old, any serious impediment to respiration was a sufficient indication, also injured chest development or frequent colds. The results produced by the growths should be the guide, not their mere presence. He agreed with Dr. Gibson that the cases which suffered most, both in their ears and general development, were not the confirmed mouth-breathers, but those who with effort breathed through partially blocked nasal channels. He would strongly

deprecate the advice given by a travelling lecturer to fasten the mouths of children by strapping at night so as to cure them of mouth-breathing as both cruel and positively harmful. Facial twitching might generally be cured by removing adenoids, and he had seen one case of general chorea which appeared to be partly due to the same cause. Epileptic seizures not infrequently were due to adenoids, and should then be treated by their removal. His greatest objection to the hanging head position was that it increased the hæmorrhage. In operating he preferred forceps, because they removed the greater part of the mass and did not leave behind abundant debris to decompose in the nasal passages. After operation the child should lie on its side, not on its back. This was important as there was danger of asphyxia from vomited blood. It was easy to examine the post nasal space with the finger when you knew how, but in a post graduate course he had found it most difficult to teach. Recurrence after operation was less frequent when operation was very thorough, but he preferred to risk recurrence rather than to leave behind a cicatricial condition of the naso-pharynx.

NEWCASTLE MEDICAL SOCIETY.

A MEETING of the above society was held on July 20th. Present: Dr. Beeston (in the chair), Drs. Dunlop, Ayres, Harwood, Harris, Treloar, Eames, Hester, Nickson and Dick.

Dr. EAMES read a paper on "The Health Regulations of the Port of Newcastle."

GENTLEMEN,—“It is directed that, provided stone ballast is found on examination to be clean and free from offensive odour, stone may be tipped for use in the harbour works, and it shall not be necessary to tip it so that it lies below low water mark; but any sand or debris of stone, etc., which may be with it, and any earth or sand ballast, shingle ballast, etc., must be tipped at sea.” So reads the regulation of the N.S.W. Board of Health, and it applies to “All Eastern Ports, including New Guinea, Philippine Islands, China, Japan and the coast of Asia generally, and the adjacent islands, East Coast of South America, East Coast of South Africa from the northern boundary of Natal to Delagoa Bay, including Delagoa Bay, Madagascar, Mauritius, Seychelles, Reunion and the adjacent islands.”

Now, what does this regulation mean? Mr. Karp, President of the Newcastle Chamber of Commerce says:—

As showing the magnitude of the interests affected, the average monthly quantity of ballast brought to Newcastle is 15,000 tons. Of this, 9,000 tons come from various ports, and 6,000 tons come from ports which are “proclaimed infected,” the proclamation being permanent whether the port is healthy or not, and vessels coming from these ports with ballast are treated as though the ports were infected, whether they happen to be so at the time of loading the ballast or not, and whether the ballast be taken from the bottom of the sea or from the side of a mountain.

To send the ballast to sea lighters are employed, loaded and towed outside when the sea is not too rough. It is a slow process, expensive, and a great burden to shipping.

Capt. Crowley, ship “Verajean,” says:—

The loss to my owner is £30 per day, through the detention and want of facilities of getting rid of our ballast. We have lost already 14 days, and have only got rid of half of our ballast—loss to my owner, £420. How much the ship will lose in discharging the remaining half is more than man can tell. By this unnecessary detention in port we may lose 5s. per ton from Portland (Oregon) home on 3,100 tons, which means nearly £800 loss to my owner. I feel I have just cause of complaint re the quarantine regulations, and will leave my case in the hands of the people of New South Wales, to have these unnecessary vexatious quarantine laws

amended. I am quite certain their spirit of fair play will not allow such regulations to continue.

Capt. Felding, ship “Harold,” says:—

That the cost of discharging and lightering 1,000 tons of ballast to sea was £75, as against about £11 10s. for hoisting the same quantity from the ship and filling it into the foul swamps opposite the ballast jetties. That in itself, a matter of about £60 on 1,000 tons of ballast, was a serious loss to shipowners. As ships arriving from proclaimed ports were about four times as long at Newcastle as vessels from unproclaimed ports the loss was doubled, and in some instances, owing to the likelihood of loss of charter, almost impossible to estimate. Of course it was the Board of Health's duty to protect the people from infectious diseases, but it was also their duty to ascertain on what grounds ports were proclaimed. Why were they all lumped together as Eastern ports? Japan was not a land of swamps and malarial fever, but a country of mountain and valley, and not even tropical. If the ballast from proclaimed ports were a source of danger to the inhabitants the regulations to guard against that danger were not what they ought to be. Men working at the ballast were allowed to mingle with people on shore as freely as if they had been discharging ice. And the lighters that took the ballast to sea were, without having been disinfected, afterwards used to convey any cargo ashore. Perhaps there were those who would say that the Board of Health were squeezing them hard enough now, and should not be persuaded to put shipmasters to the expense of fumigating themselves. If there were danger lurking in the ballast there was also danger to and from the men working it, and when health laws were made they should be made with a vengeance, not on the principle of a bag open at both ends. A ship coming from proclaimed ports with ballast suitable for road-making or building purposes was not, he observed, as a rule ordered to dump that ballast at sea.

Let us see what evidence the Board of Health have to justify them in imposing such a disability on the commerce of New South Wales.

Dr. Poore, in his book on “Rural Hygiene,” says (p. 112):—“The question whether among the bacteria which are found in soil some may not be hurtful to mankind is a question of great interest and importance. If disease causing organisms find their way into the soil may they not multiply, or, at least, continue to live, and then prove a danger to health? There can be no doubt that pathogenic organisms do exist in the soil, but their power to harm would seem to be practically very small indeed; and to regard the soil as dangerous because some pathogenic organisms may lurk in it, would be about as rational as it would be to condemn vegetable food because of the occasional dangers of hemlock, aconite, and the deadly night shade. It is well known that if the soil be inoculated into some of the lower animals, such as guinea pigs, fatal results will follow from malignant cedema, tetanus; and also that the earth, and especially street mud, if ground into wounds in the human subject, may cause similar disease and the death of the victim. It is equally well-known, however, that the workers of the soil, agricultural labourers and gardeners, are amongst the healthiest classes of the community, and that they are not credited with any diseases which are special to their calling. The disappearance of malaria (a real soil poison) when land is drained and tilled is a fact which is interesting in this connection. It seems to be a fact that the great doctrine of the ‘survival of the fittest’ holds good for microbes in the soil, as for all other organised things everywhere; and that organisms, which flourish in the human body, languish and cease to multiply in the soil where the conditions are unsuited for their multiplication, or even for their survival. They get overgrown by saprophytic microbes, and even if they do not die the risk of their finding their way into the ground water is practically nil, for we have seen that humus is the best of filters.”

In the *British Medical Journal*, February 25th, March 4th and 10th, in the course of the Milroy lectures on the “Earth in relation to the Preservation and Destruction of Contagion,” Dr. Poore deals very exhaustively with the subject, and I will quote from his lectures what refers most to the question at issue.

PLAGUE.

"Plague has been regarded as a soil disease, but recent evidence must materially modify this opinion. Experiments carried out in districts where a disease is epidemic or endemic necessarily acquire a measure of certainty from that fact alone. The unfortunate accident which occurred last year in Vienna, much as one may deplore it, was an object lesson of the greatest value, and converted what many regarded as mere theories into facts which all can read and understand. In the recent epidemics in the East the theory that plague grows 'in the soil' has received no support whatever."

In India the two facts which have come to the front are the danger in relation to plague of (a) rats, and (b) abrasions on the skin; and it may be said that the following are the most important items in the spread of plague:—

1. Filthy habits of the people, such as spitting over the floor and others mentioned above.
2. Filthy houses.
3. Overcrowding, and consequent rapid increase of contagious disease when once imported.
4. Presence of rats, insects, and other vermin.
5. The naked condition of the people going about, such people presenting almost unlimited opportunities for the entrance into their tissues of plague poison by inoculation and through abrasions.
6. Pollution of soil and houses with the excretions of man and animals.
7. Filthy clothing and absence of bodily hygiene.

MALARIA.

A few years ago I should have spoken of "malaria" as undoubtedly caused by something in the soil itself, but the discovery of hæmatosoa in the blood of sufferers from malaria has altered our point of view. The most widely spread poison in the world has become something which is visible and tangible and inoculable. No discovery which has ever been made in the domain of medicine is likely to have such far-reaching effects. Further, it seems certain that the infection of human beings may take place via the mosquito, and we are now concerned to find out whether this is or is not the only medium through which the blood of man receives the parasite. Some who are well qualified to speak would answer in one way and some in another.

If, however, on the one hand, we are able to show Europeans the importance of protecting themselves against the attacks of insects, we must, on the other, continue to make use of our accumulated knowledge as to the conditions of soil which indirectly cause remittent fevers to be endemic. The conditions of soil which give rise to malaria are too well known to need any lengthy discussion here, but airborne infection or waterborne infection cannot be lightly dismissed.

It is generally conceded that the turning up of virgin soil is one of the most fruitful causes of malignant malarial fevers, and under this heading is included blackwater fever, which has recently become so common. Surgeon Bowden, R.N., D.S.O., informs me that the turning up of fresh soil is often followed by an influx of mosquitoes. On the other hand, the cultivation of the soil seems ultimately to lead to the decrease and disappearance of malaria.

After referring to a group which (like malaria) seems to be dependent upon the bites or stings of insects which, affecting animals rather than man, yet throw much light upon the pathology of infection, a group including gnats or tsetse fly disease, the "looping ill," a disease which is common in the North of England and Scotland which has been noticed to be fatal to sheep frequenting certain pastures; Texas fever of cattle, and the South African horse disease, the lecturer concluded as follows: There are other diseases more or less suspected of being soil diseases, but the facts are at present too few to make any discussion of them profitable. These are yellow fever, tert-beri, swine fever (undoubtedly propagated by fouling of the surface soil), cancer (?), thread worms, hydatids, and ankylostoma duodenale.

and in conclusion says:—

In these lectures I have brought forward many facts to show that there is no proof of any danger arising from the use of dung for agricultural purposes, while it is undeniable that the practice of agriculture is pre-eminently healthy and invigorating. I have been unable to find any evidence that contagia spread in the soil. To live in filth, and to inhale the products of putrefaction given off from privies or piles of faeces or sodden ground result in disease, but there is no evidence whatever that disease thus generated is able to spread through the soil and infect a neighbouring house or street. Looked at in another way, we must admit that filth disease, like many other forms of disease, is proportionate to overcrowding.

Sir Seymour Haden, in the *British Medical Journal*, 27th May, 1899, says:—

THE MILROY LECTURES.

The importance of these lectures as the first utterance of the kind in affirming by the aid of personal observation and collected facts the principles for which I have been contending for so many years, and as dissipating the fallacies which for too long a time have been allowed to possess the uneducated ear is so considerable that I can do no less than accord them a distinguished place in the final record I am now making. If, in his evident desire to be judicially fair, Dr. Poore has somewhat attenuated the value of his own observations by giving undue prominence to those of others, this cannot be chargeable upon him as a fault. It is enough for the purpose of this record that he tells us in correction of the speculations of Sir Charles Cameron, of Dublin, that the bacillus of diphtheria, like that of enteric fever, has never yet been found in the soil; that the discovery of hæmatosoa in the blood has opened to us a new view of malaria as something altogether different from a soil disease; that the plague bacillus has never been met with beneath the surface; that it is not in the earth, but in the air that we must chiefly expect to find the morbid particle (whatever that may be), and in the surface water, which is its readiest carrier to the soil, and it may be, a little, but only very little, below it; that the *dejects* of the patient, and the germs of anthrax and of tetanus, though found to have attained a lodgment within the particles of the earthy mass, form no part of its substance, and lose all their virulence when once there. In a word, that the enteric fever referred to by Sir Charles Cameron, so far from having its *nidus* in the soil, is, as I have stated, far more likely to have its origin in the actual contact, under conditions of filth and overcrowding, of one fever patient with another.

AD TERRAM.

For myself, however—and I am not sorry to have an opportunity of making the statement here—I am disposed, in the absolute belief which I have in the soil as the final correlative of every form of organic delay, and even of disease, accruing, in the course of Nature, to its surface, to go farther than Dr. Poore, and invest it with supreme power as such universal correlative—as the chief factor in the great oesimical design, in short—for this great purpose. Never, surely was the crematist farther at sea than when, in pursuance of his alma, he assumed the contrary, and, with the aid of the *Times*, went out of his way to proclaim it *urbis et orbis*. "*By the act of interment we literally sow broadcast through the land innumerable seeds of pestilence, which long retain their vitality, etc., destined at some future time to fructify in premature death or ruined health to thousands!*" Such is the statement which, in presence of a world's population which is ever-increasing, and an individual duration of life which is ever-extending, the public is seriously invited to believe, as if—for it means nothing less—the earth and its inhabitants were thriving on disease.

I can, in fact, see nothing more probable than that, as water, in the shape of rain, is chiefly concerned in cleansing and washing the germs of disease out of the air, so the earth, as the natural filter of such water, is the ultimate cleanser and disinfectant of both. In a word, that its beneficent office in this respect is the very opposite of the malevolent office which is imputed to it by the advocate of cremations.

Here, however, I find myself under the necessity of parting company (though only for a moment) even with Dr. Poore, seeing that, though we arrive at the same conclusions, we get at them by the aid of materials, which are not the same, and by means of a language which does not convey the same thing to the educated ear. The point is an important one, because much of our misunderstanding of the power of the earth as a disinfectant has arisen out of it, and no small amount of capital hostile to its pretensions on this score has been manufactured out of it.

In his first lecture, for instance, Dr. Poore expressly tells us that when he speaks of earth he means *humus*—that is, of the earth of his kitchen garden, which is heavily laden with animal matter—while I have been making my experiments in the comparatively hungry soil of the park land which surrounds this house. In other words, while he has been burying animal matter in animal matter, I have been burying it in earth which nearly approaches the condition of what is called "virgin soil." The results obtained by us are consequently not the same. My reason, however, for taking note of the difference is that while his proceeding represents "interment" in its worst form, mine represents it in its best; his in the form which I have especially condemned, and which is in fact made the groundwork of the crematist's objection to burial; mine in the form in which burial ought to be, and might be, carried out if cemeteries were only properly managed.

The language again, which he employs, and which is that too commonly used by the bacteriologist, is from my point of view objectionable because it encourages the popular belief that the body, even when properly buried, instead of re-entering the atmosphere inensurably and in every way inoffensively, is beset by a sort of nondescript borderland saprophytic fauna whose office it is to devour it—a reading which the crematist of course goes out of his way to encourage, and which is really materially helped by the use of such terms as "the living earth" to signify nitrification, and of such a word as "hatched" to signify the germination of the

saprophyte, which, I take it in common with Dr. Poore, is at best an organism little higher than the lichen or the fungus. Nor am I attaching too much importance to a carelessness of terminology which I believe began with Pasteur, because while it imposes upon the popular ear, it is not without its effect even on our own—an effect which, in fact, is demonstrable. When Dr. Poore, for instance, digs down into the humus in which he has buried a rabbit and finds it “full of earwigs,” even he derives, *ipso facto*, a sort of warrant for his terminology; while I digging into my own graves, which I do once a year to determine the progress of nitrification and finding nothing of the kind, not unnaturally take exception to it. I have also another reason for objecting to it in the fact that seventeen years ago, when bacteriological science was comparatively young, I wrote a letter to a late very distinguished friend on the subject which, though only half serious, will even now bear repetition.

“38 Hertford Street, Mayfair.

“December 18th, 1882.

“MY DEAR GULL,

“I am glad to observe that what I have called the bacterial bugbear is beginning to moderate its pretensions as a general alarmist. Not that I disbelieve in “germs” and other entities equally occult and speculative, which by a pretty free use of Pasteur’s term are being employed to shake our faith in the plan pursued by Nature for the resolution of dead matter since the world began. All I say is that, without being in a position either to affirm or deny the existence of these aggressive germs and the harm they are said to do, I should like to hear something of the friendly germs and the good they do. If it should come to be proved, which is possible, that the great operations of Nature, destructive as well as constructive, are carried on by germs, all I can say is that I am prepared to think as highly of germs as I do of chemical action, or of any other of those forces, physical or vital, by which Nature is pleased to work. I object, however, to their employment as misleads. I object to hear them spoken of as they were creatures which prey upon us, and to have them hurled at us as Nemesis for our misdeeds, when, really, all we know about them is that the work they do is very like the work of ferments such as the yeast plant and other vegetable products of a similar character. I will be bound to say that if, at this moment, we canvassed public belief upon the point we should find nine-tenths of it in terror of all microbes not as plant, but as predacious animals, the more formidable that they are invisible to all but the expert, and that—if we swallow them, as perforce we must—it is in the hope that by doing so we sterilise them—which, in fact, in nine hundred and ninety-nine cases out of a thousand I fully believe we do.

“Yours,

“F. SKYMOUR HADEN.”

The reappearance of this letter in connection with the Milroy Lectures reminds me, however, of another thing which has amounted to a profession of faith with me for many years, and which I observe has not escaped the acumen of Dr. Poore—the recognition, I mean, of the inherent power of the individual to resist, against the heaviest odds, the conviction of disease—a power evidently immeasurably greater than that either of the *sol-didant* omnipresent microbe or of the artificial bacillus, however carefully it may be cultivated. I cannot but think, with every respect for the praiseworthy efforts of the bacteriologist to track the malarious particle to its lair, and to master it there with its own weapons, that room still exists for a larger faith in those provisions of Nature for our individual protection than we are altogether willing to accord to them. If it is really a fact that, with every drop we drink, and with every mouthful we eat, we are taking in enough of the active principle of disease to destroy a regiment, and that, notwithstanding, we not only escape infection but are perpetually diminishing the zymotic death-rate, I find myself, with Dr. Poore, obliged to accord a far greater value to this beneficent endowment of personal immunity than is commonly conceded to it.

How does the evidence of these authorities compare with the actual results? The foreshores of Newcastle, the whole of Bullock Island, and a large amount of the foreshores of Stockton are composed of stone, soil, shingle, and sand of all descriptions brought here from all parts of the world, Eastern and Western; malarious, yellow fever stricken, and notorious for other epidemic diseases, many of which have been accredited as soil diseases, and what is the result?

There is no record of any epidemic among the population of any soil disease; but, what is of far greater importance and upsets any theories that may be held as to the danger of carrying disease, there is no record of any disease occurring amongst those who have worked the ballast, and who by the nature of their employment (cuts and scratches being of everyday occurrence) must have been inoculated if there were anything to inoculate. This record extends over a period of almost a century.

Dr. Ashburton Thompson (in the *Sydney Morning Herald* of the 14th instant) said, “The object of the regulation to which exception had been taken was to prevent people from landing solids here, which contained the cause of disease. It was not specifically to prevent people from taking disease.”

I can safely leave the matter here in your hands, gentlemen, to calculate the infinitesimal possibility or probability of the danger of landing solids, which contain the cause of disease in ballast, which will not give some indication of its presence at any rate upon some of those who have worked it into the ship, and slept over it for some two or three months.

Dr. BEESTON said that from a bacteriological standpoint he could not express any opinion as to the possibility of introducing disease into these colonies by means of ballast.

From his own personal experience he could state that the present municipality of Carrington was almost entirely made up of ballast which had been brought from every conceivable quarter of the globe, and placed there before any of the present quarantine regulations were in force. As far as he knew, and he had been practising in Newcastle for seventeen years, there had never been a single case of disease which could in any way be traced to infection by this ballast. He therefore thought it could safely be inferred that the possibility of disease occurring was not a very immediate one, and taken as against the restriction placed on commerce of enforcing the regulation at present in existence seemed to him very arbitrary.

Altogether, Dr. BEESTON thought that in the matter of quarantine it was quite possible that we were entirely on the wrong track. That it would be far better to set our own house in order than to restrict commerce by taking excessive precautions, which to him certainly appeared imaginary.

Dr. NICKSON said that he felt certain that when the Board of Health went into the question they would make some very radical alterations. They would see that the present regulations in force, while entailing great loss to trade, and through it to the revenue of the colony, offered no compensating advantages.

There could be no question that our quarantine laws were not in keeping with the modern views on the subject (here several leading articles in the *British Medical Journal*, and papers by authorities on public health, were quoted in support of this statement).

Regulations of the type in force in New South Wales had in most countries been abandoned, because after trial they were found not only useless but fraught with danger.

To erect a barrier of such a kind as to eliminate all possible risk of contagion entering through our ports would paralyse trade.

Our present half measures, while failing in the object for which they were intended, hamper commerce, and awaken in the minds of the people a false sense of security. A ship with certain classes of infectious disease on board must, of course, be dealt with, but the real safeguard against disease, local or sea borne, is a perfect system of internal sanitation and health laws, and in that direction the jurisdiction of the Board of Health ought to be extended, so that, our own house being set in order, we would be able effectually and thoroughly to deal with any disease that might arise, and we would not be wasting our efforts in regulations, imperfect and full of loopholes as far as keeping out disease is concerned, but inflicting serious loss through increased expenses and delays on merchants and ship-owners, and through them on the working class and general revenue.

EXTRACTS FROM FOREIGN MEDICAL LITERATURE.

BY WALTER SPENCER, M.D., ENMORE, N.S.W.

Gaceta Medica, Mexico, January 1, 1899, in a paper on *Nervous Blindness*, Dr. Ramos records his experience that double complete blindness may be a primary nervous manifestation; that it may occur without anterior or concomitant hysterical symptoms, and that it may clear up in a few days. *Phosphotulein* is mentioned as producing a rapid increase of body weight, with improvement of digestion, relief of epigastric pain, anorexia and emesis. In chlorosis it increases the quantity of hæmoglobin more than iron would. Increase of seven kilogrammes has been observed in thirty days.

Cronica Medica, Lima, January 31st, contains an account of the Peruvian *Febria Verrucosa*, by Dr. Odriozola. In the sheltered valleys parallel with the coast the atmosphere retains a high and uniform temperature, in which the disease assumes its severest form, as the so-called fever of "Carrión." In valleys which run perpendicular to the coast, where the air is frequently renovated, and the temperature variable, its virulence is less and its eruption benign. Although the natives are to some extent immune, it has been transmitted to their offspring during intra-uterine life. Unless by inoculation, it is non-contagious. Liability to relapse is doubtful. It sometimes runs concurrently with manifestations of tubercle and syphilis; it is influenced also by impaludism, which yields to Quinin. It causes great anæmia infarcts of the hæmopoietic organs. Specific microbes have been identified, but culture observations are not yet mature. Incubation, invasion, fastigium, and termination are described. Pyrexia presents two types—the intermittent and remittent. The eruption may be both external and internal, and cases which manifest the former are more favourably inclined; simple petechiæ develop into verrucæ, symmetrically distributed as though in relation with the nerves. It may occur on serous or mucous surfaces, or in the substance of tissues, even in the nerve centres, but the verrucæ actually originate in the interstitial connective tissue. Externally they may give rise to abundant hæmorrhage, suppuration and mortification. The trunk is usually respected.

Dr. Hildebrand has found Orthoform efficacious in very bad *Toothache*. It is applied in hot alcoholic solution by an absorbent pledget. Relief is immediate, and a night's rest secured. It must be applied in haste, because evaporation is rapid, and Orthoform, if consolidating in the pledget, can no longer affect the dental pulp.

Dr. Hoven recommends for *Gout*:—

Magnesia calcin. ... 1.50 grammes
Lycetol ... 1.30

Dissolve in 250 grammes of water. Take half after luncheon and half after dinner.

Dr. St. Philippe recommends for complaints associated with *Scrophula* in children Iodide of Arsenic. He has employed it in 200 cases in 1% solution, 5 to 30 minims per diem. The solution must be made with cold water.

The Editor invites members of the Profession to forward to him terse notices of Medical Resignations, Vacancies and Appointments, Removals and other items of professional interest.

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

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THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
E. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; J. B. GUNSON,
ADELAIDE, S.A.; AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 21ST AUGUST, 1899.

EDITORIALS.

NOTIFICATION OF TUBERCULOSIS, MARRICKVILLE, N.S.W.

THE Mayor of the Borough of Marrickville, a suburb of Sydney, has issued a circular, dated 18th July, 1899, which we believe has been posted to every qualified medical practitioner residing within Sydney and its vicinity.

The circular reads as follows :—

BOROUGH OF MARRICKVILLE.

Town Hall, July 18th, 1899.

Dear Sir,—In the interests of the residents of this important and extensive Borough, and the conservation of the Public Health, I am directed by the Mayor (Alderman W. W. Clarke) to respectfully request that you will be good enough to notify this Office of all cases of tuberculosis in human beings which may occur in the practice of your profession among the residents of Marrickville. Particulars as to residence, age, sex, occupation, duration of disease, together with such other information you may deem necessary, will be duly registered here, with a view to steps being taken by my Council to minimise the spread of the disease.

The welfare of the community is the Mayor's warrant for soliciting your kind co-operation in this important matter.

I am, dear Sir,

Yours faithfully,

HENRY T. BROWN,
Council Clerk.

Considering that tuberculosis is the most deadly disease experienced in the present generation, and that in all the Australasian colonies it stands at the head of the list of the causes of death, this attempt to combat with it and try to minimise the evils accruing therefrom is most commendable in the Mayor and Aldermen of that Borough. We, however, question very much the utility of such an isolated attempt to stamp out this disease even in such a small community as Marrickville. There are also certain circumstances existing which will surely militate against the success of this experiment, which may now be considered.

The legal aspect.—There are already in existence in the colony of New South Wales certain enactments which provide for the compulsory notification of leprosy, small-pox, diphtheria, scarlet fever and typhoid fever. Being incorporated with the laws of the country, medical practitioners are compelled under a penalty to notify to the authorities when called upon to treat these cases, and then the Board of Health or local authority intervenes and takes the necessary steps to cope with the evil; but, as tuberculosis is not included in this list, the Board of Health, the local authority, or any Borough Council has no power to interfere.

The medical aspect.—A most stringent rule in medical ethics is that which prohibits a medical practitioner from giving information to outsiders regarding the nature of diseases from which his patients may suffer. This is so strictly observed by the medical profession that unless compelled to do so by an Act of Parliament or while giving evidence in one of the higher courts before a judge who will take

no excuse and would probably enforce a penalty for contempt of court, a breach of this rule never takes place.

While commending the Marrickville Council for its attempt to cope with the ravages of tuberculosis, we fear this effort must prove ineffectual without special powers from Parliament. We would recommend, as a first step, that the Mayor and Aldermen of the Borough join with the other corporations and the electors in the colony in petitioning the Government to take measures towards securing the notification of tuberculosis in human beings. It is obvious that in order to deal with this disease it is necessary that the authorities be informed of its whereabouts. The Board of Health and the local authorities would then be in a position to devote their attention to persons directly interested, and not be obliged as now to address "the man in the street," who is more or less indifferent to their efforts. This modification would enable the authorities to take measures for the alleviation and prevention of this dire disease with some prospect of successful results.

TUBERCULOSIS.

IN his evidence before the Commission on Tuberculosis now sitting in Sydney, Dr. Tidswell, Principal Assistant Medical Officer to the New South Wales Government stated that tuberculosis alone was responsible for three deaths *per diem* all the year round in that colony. In plain words, out of a population of nearly a million and a half in New South Wales, 1,095 die of phthisis annually. Such an enormous death rate in a colony where, in the early days, no such disease existed, but which was lauded as affording special facilities for the treatment and then utilised as a sanatorium for patients suffering from tubercular and kindred diseases renders it unnecessary to inquire into the causation of this result. It, however, would be well to consider what measures should be adopted for the prevention or amelioration of this state of things.

The infectiousness of tuberculosis has been so thoroughly recognised as an established fact that we need not reiterate the data upon which it has been founded. It is also unnecessary to dwell upon such factors as tuberculous meat or milk. The question left to be considered now is: What measures should be adopted in order to lessen the spread of the disease? About nine years ago, hopes were raised that a panacea for this evil would be found in Koch's new tuber-

culin treatment, which, however, were destined to be destroyed, and tuberculin was abandoned as an agent, if not positively harmful, at least incapable of effecting the good claimed for it.

What other means can be adopted for the mitigation of the evil? It has been suggested that an anomaly exists in isolating patients suffering from leprosy at that period of the disease in which it is incapable of being transmitted to others by contagion, infection or inoculation and allowing phthisical patients to mingle with healthy subjects and spread this fatal disease broadcast about them. A scheme for isolating such patients, we are afraid, would involve such an extensive interference with the liberty of Her Majesty's subjects as to become impracticable. It only remains, therefore, to insist that phthisis should be declared as a notifiable disease in such a manner as to enable the health authorities to investigate personally each reported case and insist that certain necessary precautions and sanitary measures be adopted which would lessen the spread of the disease.

Some care must be exercised regarding the steps to be taken with reference to the notification of tuberculosis, because, if declared to be infectious under the Public Health Act of this colony, it would prohibit a consumptive patient from travelling in any train, tram, steamboat, or other public conveyance, and no hotel could receive such a person, who would literally become ostracised from appearing in public—theoretically, a wise proceeding, but practically inexpedient or impossible.

We anxiously look forward for good results from the labour of the Commission on Tuberculosis now sitting in Sydney, and hope that some good results will accrue.

LETTERS TO THE EDITOR.

THE MEDICAL ASSOCIATION AND DR. RAMSAY SMITH.

(To the Editor of the *Australasian Medical Gazette*.)

SIR,—In a Presidential Address, delivered before the South Australian Branch of the British Medical Association, and printed in *The Register* of July 3, Dr. Swift criticises a statement of mine regarding diphtheria at the Adelaide Hospital, "that we have never used antitoxin, and we have never had a death." My statement was quite correct. He goes on:—"I must conclude that either their diagnosis has been greatly at fault or their good fortune has been phenomenal, or that they must have employed some method of treatment which has not occurred to the rest of us poor mortals, and which is only vouchsafed to and permitted to be used by such deified individuals." Our diagnosis, I venture to say, is as accurate as clinical medicine and bacteriological science can make it. As

to methods I shall speak presently. He then proceeds:—"The public have a right to expect that they will be treated in a public institution by the most up-to-date and approved methods, and that a medical man holding such a responsible position as Senior Resident Physician will be cognizant of and ready to use all the latest and best remedies." I have nothing to say against those who find antitoxin the best remedy known to them. I have always refrained from criticising the antitoxin treatment of diphtheria; but if I were to speak on this subject I should found my statements on what I know and have seen. If my experience has been greater than Dr. Swift's—instead of nil, as he imagines—that is a matter I cannot remedy, though he may; and he may yet find as I and others have found, that antitoxin is not the perfectly harmless, absolutely essential, never failing specific it is in some quarters claimed to be.

As to our mode of treating diphtheria, I wish to give credit where credit is due; and this is my reason for referring to an address which otherwise I should allow to pass into the limbo of silence which claims it, considered as a contribution to medical literature. What credit is due to the method belongs to the Hon. John A. Cockburn, M.D. (Lond.), the present Agent-General for South Australia. For over two years I have carefully and consistently carried out a plan which a very severe experience of Australian diphtheria taught him to believe in, and to follow in practice. So strong is my faith in scientific medicine that the results did not surprise me, nor did I think there was anything remarkable in them until Dr. Swift drew public attention to their phenomenal character. As to the implied condemnation of this method, I am not aware that a mode of treatment demands reprobation because it is essentially Australian, because it is rigorously scientific, because the remedies used are to be found in the British Pharmacopoeia, because it is recent, because it is phenomenally successful, because it has as yet proved absolutely safe, because everyone can employ it, and because it is unknown to Dr. Swift. That he knows nothing about it is his fault, not mine. By the courtesy of the Hospital Board, we are always able to welcome to our wards everyone who comes to look on or study our cases or methods; and it may interest some of the many of your readers who have done so to know that our records of recoveries from other isolation diseases are still unbroken—69 cases of measles and 115 cases of scarlet fever without a death. These results have been gained under very adverse and trying conditions, which, thanks to the generosity of the Government and the Charity Commissioners will soon be at an end.

I am, Sir, etc.,

W. RAMSAY SMITH,
B.Sc., M.B., C.M. (Edin.),

Senior Physician to the Adelaide Hospital, South Australia.

10th July, 1899.

MEDICAL ETHICS AND POLITICS.

AN OPEN LETTER TO THE MEMBERS OF THE INTERCOLONIAL MEDICAL CONGRESS OF AUSTRALASIA—FIFTH SESSION.

(Per favor Editor *Australasian Medical Gazette*.)

GENTLEMEN,—In addressing you as members of the medical profession, there is no need for me to dwell upon the many abuses from which we suffer, as, unfortunately, we are all too well aware of them. But since we are now meeting in congress to discuss matters of common interest the present seems to me a suitable time for bringing under your notice not so much our

abuses which force themselves on our attention *volens volens*, but some practical suggestions, which, if adopted, the writer believes will do something towards remedying the evils under which we suffer.

That as a body we are more concerned with our scientific advancement than with our pecuniary gain is evidenced by the fact that in this very congress, though six days are set apart for matters relating to the practice of our profession, yet the officials of this Congress when asked to devote a certain portion for the consideration of lodge and other subjects affecting the pecuniary welfare of the profession, replied that they would do so if there was time *after other matters had been discussed*. Though we would all be sorry to see pecuniary affairs put before any others, yet we may well ask if we do wisely either to the public or ourselves to put them entirely in the background.

The evils from which we suffer may be classed briefly under the following heads:—

- (1) Overcrowding.
- (2) Sweating by Friendly Societies and the like bodies.
- (3) Imposition on hospitals and charitable institutions.

- (4) Unrestricted quackery.

I purpose dealing with each *seriatim*.

- (1) Overcrowding:—

In almost every country in the world the supply of medical men is greater than the demand; even in Buenos Ayres it has been proposed to close the medical schools for five years to prevent overcrowding. We know that the Australasian universities, to which Queensland will soon be adding another, are turning out a greater number of men than the population can find legitimate employment for; while the proportion of medical men to population in Victoria has been greater for the last four years than in that of any European country except Switzerland. In view of these facts, it is doubtful if any proceeding of ours will do away with overcrowding entirely, but we can, if united, so act that its evils may be mitigated as in the case of the legal profession, which suffers from the same cause, but has so arranged matters that the competition between individual members thereof is a mere trifle compared with that in the medical profession. At present anyone who has obtained a qualification granted by any of the licensing bodies, not only of the British Empire, but of any foreign country, is admitted, on the strength of such qualification, to practice in Australasia. There is thus the utmost free trade in the profession here, but the free trade is all on one side, and as none of the foreign countries, except Italy, allow our graduates to practice therein, members of those countries cannot justly grumble if our licensing bodies refuse to recognise their qualifications. This may be considered hard, but if we give advantages we should have something in return. It may not be everyone's experience, but it has certainly been the writer's, that the lowering of fees has been done more by foreign, especially German, practitioners—to which, however, there are many exceptions—than any others. I would, therefore, suggest that we seek to obtain for our licensing boards power to refuse registration to the holders of qualifications from countries, *e.g.*, France, Germany, which do not recognise our diplomas. Something, thus, might be done to check the influx of the foreign element, more especially as the like is done in Great Britain, where no foreigner is admitted to the Medical Registrar unless he has a British qualification also.

- (2) Sweating by Friendly Societies, etc.

No medico seriously objects to the original principles of Friendly Societies—in fact, it may truly be said that

if it were not for the fostering aid given by medical men to such societies in the past they would be practically non-existent. It is now, however, universally agreed that the abuses in connection with them have reached such a magnitude that, unless resisted, our very standing is threatened, indeed it cannot be denied that the chief reason for the little esteem in which the public holds us is greatly due to the well-known fact that almost any lodge can secure our services on terms which a self-respecting cabman would reject with scorn and vituperation. Both our social and moral standing have been, and are, lowered by the conditions of work which Friendly Societies, at first our humble suppliants, but now our would-be masters, have forced upon us. So universal have been the encroachments upon the profession, that strikes against Friendly Societies have occurred, not only in Australasia, but also in the United States, Canada, Great Britain, France, Switzerland, Italy, and even in Germany. If members of Friendly Societies showed any willingness to meet us less than half-way we might expect to do much with them, but almost every attempt to obtain better conditions for ourselves has met, not only with the stoutest opposition, but also often with increased work and lessened pay, as witness—not to mention English cases—the steps which were lately taken in the Goulburn Valley after the formation of the Goulburn Valley Medical Association, and those taken in Brisbane (the very town where you are now about to assemble) some years ago after a like movement. The opposition in the former case (Goulburn Valley) was headed by a bank manager, a man who by his position ought to have been ashamed to avail himself of services which were not intended for him or his class, and which he can only claim through the generosity of a profession which gives it him under the guise of a charitable act. Small though the rate of payment by many of the Friendly Societies is, yet there are numbers of us who believe that the admission of wealthy members to the doctor's list is a far more serious abuse than any other in connection with the societies, and that if this were abolished much might be done to ward off the struggle which is now so near them and us.

The formation of a Board of Conciliation composed of members of the profession and Friendly Societies, as suggested in June last by the General Medical Council (Great Britain), may be a step in the right direction, but unless the medical representatives be men engaged in Friendly Society work, and thoroughly conversant with it, any such conference can only end in disaster, as did the conference in England last year. The appointment, however, of such a Board will probably be regarded by most of us as merely temporising, for hitherto the medical profession has done all the conciliation possible, and it is high time that we let the Friendly Societies know we can now only be conciliated on our own terms. The Friendly Societies in the whole of Australasia had at the latest date for which particulars have been supplied,* viz., years 1895 to 1897, \$3,156,641 to their credit. The Victorian returns for 1897, the last available, show that the rate of sickness has increased for the last seven years, while that of payment has decreased. Taking the Victorian lodges as a whole for the last twenty years, viz., 1878-97, *i.e.*, as far back as the records go, the excess of receipts over expenditure has been from \$21,829 in 1878 to \$32,599 yearly, never less than the former amount, and often, *i.e.*, on twelve occasions, more than the latter. It will thus be

* Twentieth Annual report of Friendly Societies, Victoria, 1898, Page XV.

The Intercolonial Medical Congress of Australasia

1899.

The Fifth Session of the Australasian Medical Congress will be held at
Brisbane from the 18th to the 23rd (inclusive) of September, 1899.

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The list of Presidents and Vice-Presidents in various sections is not yet complete, but the following gentlemen have been elected, and have accepted office :—

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G. H. OGG, M.B., Ch.M., Launceston.

Secretary : JAS. ATKIN WHEELER, M.B. Lond., Toowong.

The Congress will meet in the Technical College Buildings in Ann-street, about one hundred yards from the Central Railway Station.

A Sermon will be preached before Members of Congress by the Lord Bishop of Brisbane in St. John's Pro-Cathedral on the afternoon of Sunday, the 17th of September.

The Congress will meet on Monday morning, 18th September, at the Technical College for formal business, and the President's Inaugural Address will be delivered at 8 p.m. in the Centennial Hall.

No special subject has been chosen for discussion by the whole Congress as at the New Zealand meeting, but in the Surgical Section there will be a discussion on Appendicitis in which a number of leading surgeons have promised to take part. A suggestion for a similar discussion in the Section of Medicine has been made, and will probably be adopted. In the Section of Eye, etc., the President (Dr. Lindo Ferguson) will open a discussion on "The Eyesight among School Children under Colonial Conditions." The question of the Contagious Diseases Act, referred from the New Zealand Session, will be submitted to the Section of Public Health for discussion.

Numerous arrangements for the entertainment of visitors are being made, among which may be mentioned a garden party by his Excellency the Governor, a ball by the President, and a river picnic in the "Lucinda," etc. Trips over the Queensland railways to places of interest are being arranged, as the Queensland Government have promised free passes to each member (and one lady) over Government lines for a period of one month. These will probably be held after Congress week.

The Premier, at the request of the Congress Executive, has invited the various Australasian Governments to send official representatives to the Congress, as was done on the occasion of the New Zealand Session.

The second circular has now been posted to all the colonies, and it is the earnest wish of the Executive Committee that intending members will enrol their names at once. Members are reminded that though they may be unable to visit Brisbane, their subscription will entitle them to the printed volume of transactions.

Each member who intends to be present at the Congress is requested to inform the General Secretary at as early a date as possible of his intention, and also if he will be accompanied by a lady. Every member is requested, immediately on his arrival in Brisbane, to sign his name and address, also to state whether he is accompanied by a lady, in the reception book at the Technical College.

Appended hereto will be found the latest arrangements with regard to concessions in rail and steamer fares, together with the conditions necessary to be observed.

Queensland members will be granted free passes for member and one lady for one month. It is necessary that members intending to be present at Congress shall communicate with the General Secretary, who will forward free passes to them.

The A.U.S.N. Co., the Adelaide S.S. Co., and Howard Smith and Sons have promised 20 per cent. reductions on return tickets, available for a member and one lady.

The Railway Authorities of New South Wales, Victoria, and South Australia have promised single fares for the double journey both to their capitals and thence to Brisbane—available for member and one lady. Members must make application to the local Secretary for their colony, who will forward them certificates, to be delivered to the booking-clerk prior to starting by train. Country members must re-book at Adelaide, Melbourne, and Sydney, certificates being furnished as before by the various local Secretaries at these places. South Australia has made the reduction conditional that at least six persons avail themselves of the concession.

The Tasmanian and New Zealand railway authorities have promised similar concessions under similar conditions.

For those who prefer the journey by sea, the A.U.S.N. Co., the Adelaide S.S. Co., and Howard Smith and Sons have conceded a reduction of 20 per cent. off return fares—available for a member and one lady—the production of Member's Congress ticket countersigned by the Local Secretary being accepted as sufficient authority to do so. The Union S.S. Co. have agreed to a 10 per cent. reduction on return fares.

The reductions promised by the above companies apply also to members coming from Western Australia.

For the convenience of members a table of fares is here given:—

Reduced Fare.	Rail Return, 1st Class.			A.U.S.N.			Adelaide S.S. Co.			Howard Smith.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
FROM NEWCASTLE	...	4	0	0	...	—	...	—	...	...	—	...
„ ARMIDALE	...	3	5	10	...	—	...	—	...	...	—	...
„ GLEN INNES	...	2	13	4	...	—	...	—	...	...	—	...
„ SYDNEY	...	4	6	8	...	4	0	0	...	3	4	0
„ MELBOURNE	...	8	0	0	...	6	0	0	...	4	16	0
„ ADELAIDE	...	10	0	0	...	8	0	0	...	6	8	0
„ ROCKHAMPTON	...	—	—	—	...	2	8	0	...	1	18	5
„ MACKAY	...	—	—	—	...	6	8	0	...	5	2	5
„ TOWNSVILLE	...	—	—	—	...	7	12	0	...	6	1	7
„ CAIRNS	...	—	—	—	...	8	8	0	...	6	14	5
„ COOKTOWN	...	—	—	—	...	10	4	0	...	—	—	—

The A.U.S.N. Co. advise that their tickets are interchangeable with the Adelaide S.S. Co. A.U.S.N. steamers leave Melbourne every Saturday, and Sydney every Tuesday, arriving in Brisbane the following Thursday.

Though the regular sailing day of Howard Smith and Sons and A.U.S.N. Co.'s steamers from Sydney are Tuesdays, each of these companies will be despatching from Sydney a steamer on Saturday, 16th September, at noon. These will reach Brisbane on the following Monday—the first day of the Congress.

Combined steamer and train tickets will not be issued.

The above rail reductions do not include sleeping-berth fares.

WILTON LOVE,

GENERAL SECRETARY.

seen that as far as Victoria is concerned, and I doubt not the same is true of the other colonies, the excuse that the Friendly Societies cannot afford to pay increased sums to their medical men is untenable, although to do so it may be necessary to re-arrange the payments to the Sick and Funeral Fund on the one hand and the Medical and Management Fund on the other, the disparity between these two funds being very great, a fact to which the actuary for Friendly Societies draws attention in his report. As a protest, therefore, against Friendly Societies, I would suggest the establishment in every large town of Provident Medical Associations—not Medical Aid Associations—but such as those in Eastbourne (England) and Sydney. This is a step which may well be copied with advantage, since it gives medical men complete control over the members, enforces a wage limit, ensures better pay for less exacting work, while at the same time it serves to reduce the strength of the Friendly Societies. The weak point about these associations, viz., that they do not provide for sick pay and funeral expenses as Friendly Societies do, can be readily overcome by adopting the rules of the Cork (Ireland) Medical Benefit Association* which has a benefit as well as a medical department, the joining of the benefit department being optional, an advantage which Friendly Societies do not give unless to honorary members.* In smaller towns the same ends may be obtained by medicals adopting the like methods without the formation of an institute or association, a method advocated by Mr. Bruck in his well-known pamphlet, but it should be restricted to the wage-earning class, as at Broken Hill.

In striving for the two great principles, viz., adoption of a wage limit and increased pay, we must not forget other points, e.g., uniform age limit both as to members and attendance on their children, extra payment for examination on admission, for night and holiday work, for operations, special work, chloroform, midwifery cases, accidents due to football and other sports, misconduct, etc. These can best be secured by the establishment of the association referred to. Meanwhile, in order that each individual member of the profession may know what others are doing, and so be helped to make a stand when otherwise no protest would be made, it is advisable that a certain portion of our medical journals should be devoted to recording what is being done here and elsewhere in these matters. Such a column revived under the old heading, "The Battle of the Clubs," with an accredited contributor in each colony, would, if a regular feature of our journals, serve to keep alive the interest of many who are now apathetic. It would also do much to help the federation of all societies having the same objects in view, as now men in one colony know little of what men in another are doing.

In opposing the forces which, as Friendly Societies are, arrayed against us it may be well to consider whether we are wise in not availing ourselves of the strength which we would otherwise have by combining with chemists whose pecuniary position and outlook is quite as much affected by these societies as ours is. The Americans have already recognised the utility of such a union, for in February last the New York County Medico-Pharmaceutical League was formed, whose objects are *inter alia* the regulation of lodge contracting, dispensaries, hospitals, the encouragement of operations at home, etc.

Again, it may be advisable for our various medical societies, especially those dealing with defence, to

consider the expediency of appointing a representative to attend the meetings of the Medical Boards, and to lay before each candidate a fair and clear statement of the conditions of practice in the colony in which he is being registered, special reference being laid upon Friendly Societies and medical aid work. If this were done, the excuse so often urged, and justly urged, by new arrivals that in taking up the work they did they had no idea they were acting contrary to the best interests of the profession would become valueless, even if it did not have a deterrent effect upon some who would otherwise be working unconsciously against the general body of the profession. Of course it is not absolutely necessary that one of our members should interview candidates at such a time, as a circular letter emanating from a recognised society might be equally valuable; but considering how often printed and circular letters are thrown aside, the personal interview would be decidedly the more satisfactory, especially if the interviewer made a circular letter issued by his society the basis of his remarks to candidates. In each of the University towns, also, a representative might be deputed to address the fifth year students upon the same matters, either just before or after their graduation. And here it may not be out of place if I venture to suggest that the Congress would not be going out of its way in acknowledging a debt, which many individual members of the profession acknowledge, by giving its hearty thanks to Mr. Bruck for the pamphlet which he published in 1896, entitled "The Sweating of the Medical Profession by the Friendly Societies of Australasia." It has been the means of opening the eyes of many lodges, and from my own knowledge, which is endorsed by others, it has induced some of the better class to voluntarily increase their payments to medical men. It is also somewhat significant that this, the first widely successful attempt to draw attention to our abuses, should have been written by a layman.

(3) Imposition on Hospitals and Charitable Institutions.

The abuse of hospitals by the wealthy concerns us deeply, since the establishment of a Health Institute as foreshadowed by Havelock Ellis in his "Nationalisation of Health" may be dismissed as unlikely in our time. This imposition could be prevented if recommendations for admission, except in cases of accident and urgency, were left solely to medical men. It is very rare indeed that a sick person is not seen by a doctor outside before admission to a hospital, and thus he is better able than a subscriber, who very often knows little or nothing of the person recommended, to judge of the patient's pecuniary position. It may be said that if the power of recommending be withdrawn, subscriptions will be lost, but admitting that, the subscriptions may still be retained by making it a provision that, with the exceptions referred to, the recommendation be endorsed by a doctor. It may be pointed out in this connection that at the Bolingbroke Hospital, London, and at the recently-opened London Polyclinic patients are only seen on the recommendation of a medical man, thus affording a precedent, if needed. Could hospital committees be induced to prosecute for fraud any case of imposition instead of settling it for a monetary consideration in the shape of a donation, a distinct check would be given to this frequently recurring practice. It may be rather late to alter the constitution of many of the existing hospitals, but if medical men could secure a place in their committees they might do much good by endeavouring to limit the benefit of such hospitals to the class for whom they were primarily intended—the wage earning class—and

*British Medical Journal, April 2, 1896.

also by advocating the employment of an enquiry officer to make investigations into the pecuniary conditions of patients, both of which are done in the case of the Belgrave Hospital for Children at Kennington (England).

(4) Unrestricted Quackery :—

Since this can only be effectually dealt with by Parliament, and as the Medical Acts of the various colonies will be unaltered by Federation, it is most desirable that a uniform law should be passed. To secure the passage of this, and to introduce such clauses as will completely check quackery, we cannot do better than follow the lines of the Tasmanian Act. Seeing that Tasmania is one of the federating colonies, the others are the more likely to adopt that Act. In this matter we may also, if we proceed judiciously, have the help of the Labour Party, for as the Editor of the *A. M. Gazette* pointed out in November, 1897, it is astonishing they haven't taken up this subject before, seeing that "it is from the ranks of the poor that the greater proportion of the victims are secured, and that legislation for the regulation of medical practice is not in the special interest of the wealthy." Such advertisements as the following, which lately appeared in the *Melbourne Age*,—"Influenza and pneumonia cured while you wait"—ought to be proof enough, even to the laity, of the need of some restriction in this quarter.

There are other matters, e.g., inadequate payment for Government work, prescribing chemists, etc., which need rectifying, but neither time nor space will permit my discussing them. I have simply placed these questions before you, not on the score of originality, but in the hope that some practical good will soon ensue. The public value us by what they pay for us, and considering our relations with Friendly Societies it is not surprising that there should appear such an advertisement as the following, taken from the *Glasgow Herald*, of May 9th, 1898 :—

"Medical.—Wanted strong man as surgeon for — Friendly and Trades Societies Medical Institute, hard night worker, active walker; must be civil, trustworthy, obliging, sober. Apply, Committee, with last character."

All too long have we been suffering, making bricks for our Egyptian taskmasters, and our very love of our work has been made a whip with which to scourge us. If we are to be saved from a bondage which is becoming more and more degrading, not only to ourselves, but also to those who impose it upon us; if we are to have the leisure for study, to say nothing of recreation for body which every labourer receives we must unite. Much has been done by doctors in unopposed practices standing out against the demands asked of them, but how much more would be done if each medico could be sure that his neighbour would not make such an extremity his opportunity. For years past we have suffered our abuses, and instead of seeing them lessen we have seen them increase with every year. Our condition is not only felt by ourselves, but is also apparent to many of the fairer-minded members of the Friendly Societies, while we have had, and have, the help and sympathy of much of the Press, especially that of the *Sydney Bulletin*, the *Argus*, the *Age* (Melbourne), in supporting our claims. But

"Know ye not
Who would be free, themselves must strike the blow."

The time for talking is well nigh spent; the time for action has come. How best can we act *cito, caute, lute*? Surely the example set us in the political world will not be lost upon us! If Federation be good for the body politic, it is good for us; if good for military defence,

it is good for medical defence also. Already it is being carried out in politics and in labour. Shall we be behind? To make such a scheme complete, Queensland and South Australia must form their unions. Isolated as we are, we can do nothing effectually. It is this want of unity which has been our bane in the past; shall we let it be so in the future? Why should we wait any longer? What is there to prevent this Congress speaking with such a voice, and taking such steps as will result in the federation, not only of our existing medical societies, but also of our medical defence unions! If every member of this Congress will not only join one of the Medical Defence Associations, but also become an active propagandist of it, we will soon restore to our profession its former honour, and no longer will another Carmichael be needed to give a prize essay on suggestions "how to render the profession a more respectable body than it is at present." It is not a mere question of high or low fees; it is a matter which concerns our very existence as a self-respecting body. Once lost that, our best and holiest traditions are gone, and the Hippocratic oath becomes a mere farce. Let us then rouse ourselves, asking "When doctors differ, who shall decide; when doctors agree, who shall venture to differ?"

Wishing the Congress every success.

I remain,

Yours truly,

ABOU BEN ADHEM.

4th August, 1899.

THE LAUNCESTON HOSPITAL DIFFICULTY.

(To the Editor of the *Australasian Medical Gazette*).

SIR,—In the *Gazette* of July 20th there is a letter dealing with your article on the above subject, from the pen of Dr. Ramsay, Surgeon-Superintendent of the hospital. Perhaps it would be better to take no notice of the said letter for the reason that the writer cannot, by virtue of his position, write or criticise anything on the above subject without his remarks being considered biased. He is in the unfortunate predicament of one who cannot express his true opinions without exposing his position; and friends and foes alike of the reform movement will, without doubt, read whatever emanates from Dr. Ramsay with a mental reservation. In proof of these remarks, let me quote Dr. Ramsay's own words, "Whilst entirely agreeing with the principle embodied in the proposed reform with regard to large clinical hospitals, I think that each case should be judged on its own merits."

Here we have the Surgeon-Superintendent agreeing that the principle embodied in the reform is a right principle; the difficulty that he sees is as to the definition of the Launceston Hospital. We say it is a large clinical hospital (we do not say one of the largest). If that be true, then Dr. Ramsay is entirely at one with those who are seeking to bring about this reform. But Dr. Ramsay would lead one to believe that instead of such being the case, the hospital is only a cottage hospital somewhat overgrown, and therefore the "principle" does not apply.

If Dr. Ramsay's contention be correct, then the expenditure of more than \$6,000 a year, and between £2,000 and £3,000 (nearer the latter than the former) for a nurses' home is rather a large order for what is not a "clinical hospital." And so the "principle" with which Dr. Ramsay agrees must not be made to apply to this particular case. Rather let the hospital

fall from its so-called proud position as one of the best colonial hospitals, and the equal of those in the large centres of population, and become a mere village institution, than adopt the "principle" in this particular case.

Why does Dr. Ramsay so labour to make the hospital such a small affair? I am afraid he must say, with good old Ovid, "*Video meliora proboque, deteriora sequor.*"

Sir, these considerations, and some others, make it very unsatisfactory, and perhaps somewhat hard, to reply to any of Dr. Ramsay's remarks. Nor would I do so if it had been quite possible to let his communication pass unnoticed. There is, however, so much in his letter that is not quite correctly stated, and such an erroneous impression is likely to be left on the minds of its readers, that no option is left. Some reply must be sent. Permit me, therefore, at the risk of too much trespassing on your space, to take Dr. Ramsay's statements in order, and give you another version of the matter.

1. "It is a pity that before such an article (yours, Sir) was written a proper inquiry was not made into the circumstances of the case rather than relying upon newspaper reports."

While admitting that it is, perhaps, unwise to base statements, as a rule, on newspaper reports, in this case the newspapers were in the main correct; if your remarks were based on such, you have the satisfaction of knowing that they were so. The promoters of reform have had nothing to do with newspaper information, nor have they relied on any.

2. "And as the Government supply practically the whole of the fund except . . . they should have the right to elect all the directors, etc."

Dr. Ramsay does not point out to you that the Government Bill now before Parliament proposes to alter this. Nor does he point out that the nominators to fill vacancies on the Board are the Board themselves. These nominations, made by the said gentlemen, are sent down to the Government for confirmation; but as the only nominations are those forwarded by the Board the Government has Hobson's choice. It is at once seen that this method admits of no really fresh influence, at any time, being brought to bear on the management of the hospital. It maintains the *status quo*. It lets no light into anything; it allows of no reform, no interference. Under these circumstances there can be no outside and independent criticism brought to bear on the management of any of the departments of the institution; and so this "*Imperium in imperio*" can ride roughshod over everything and everybody; and spends its more than £6,000 a year of the ratepayers' money practically without criticism.

3. "The hon. medical staff is also represented on the Board."

So it is, but with only one man (Dr. Pike) who is quite unable to attend all the meetings of the Board, and whose one vote counts for what it is worth. This representation, therefore, goes for nothing.

4. Your article stated that "the medical profession almost to a man are in favour of reforming the medical supervision of the Launceston Hospital. Dr. Ramsay says, "This is not a fact, there is not even a majority of the medical men of that city (Launceston) who are desirous of a change."

Sir, when I read this I could hardly credit it. This is surely not Dr. Ramsay writing! The Dr. Ramsay we know is too well informed of everything connected with the movement to make such a statement as that. He must know that such statements are not true. The facts are these. There were at the time the petition

for reform was drawn up and presented to the Board eleven practitioners in Launceston, not counting the homeopath. Now, this petition was signed by the following gentlemen:—Drs. Maddox, Hogg, Pardey, Cotterill, Pike, Murphy, Wilson, and Olemons (8). Those not signing it were: Drs. Parker, Holmes, and Thompson (3). The second, while not signing the petition (he is a member of the Board), expressed himself in favour of reform. It is true Dr. Pardey has since "changed his mind," the circumstances of which have already appeared in the *Gazette*. How then can Dr. Ramsay say that your statement "is not a fact?" How can he say that there "is not even a majority of the medical men in Launceston who are desirous of a change?" What does he mean by saying "there is, however, a small but active minority?" Why does he leave out of consideration the large majority of country practitioners who agree with their brethren in the town?

5. "On the hon. medical staff of the Launceston Hospital are some of the best doctors in the community, and they agree that it would not be to the advantage of the hospital to alter the present system of medical management."

This statement is based on the report of a supposed conference between a deputation from the Board and the honorary staff. Dr. Pike assured a meeting of the Launceston Branch of the British Medical Association that the question whether it was desirable to alter the present system was not even discussed, but cropped up casually in conversation after the meeting. The statement was issued on the authority of one man (not a medical man), and was not authorised—even if it were, what is it worth? The honorary staff consists of Drs. Parker, Holmes, Pardey, and Pike. Drs. Parker and Holmes declined in the first place to sign the petition. Dr. Pardey has since joined their "contents," therefore Dr. Pike remains alone with his one vote, which could do nothing against the pre-existing, decided, antagonistic attitude of the others, who, by the way, were elected on the honorary staff after the agitation for reform had commenced.

6. Under "4." Dr. Ramsay points out certain problematic advantages and privileges which exist for the honorary staff at the hospital. He must know that all these trumpety concessions have been granted since the agitation by what he is pleased to call "the active minority;" and that, like the Krugerian concessions in the Transvaal, are such only in name, and meant to hoodwink the paramount power.

In conclusion, Sir, I, with many others, am convinced that not Dr. Ramsay (with whom personally we have no quarrel), nor the chairman of the Hospital Board, nor the Board itself, nor even the Government can prevent the reform in the administration of the Launceston Hospital. They may retard progress; they may put back the hands of the clock; but, sooner or later, "the power that exists behind the throne" will take the matter into its own hands, and, sweeping away this nominee Board, with its cobwebs and obsolete notions, will at last place the administration of the Launceston Hospital on its proper basis, and bring it into line with modern progress.

I am, Sir, yours, etc.,

J. G. JOHNSON, M.R.C.S., L.R.C.P. Lond.
Evandale, Tasmania.

Mr. W. FINSLEBACH, Chemist, of No. 9 George-street West (whose advertisement appears on page xxiii.), desires us to draw attention to the fact that he does no counter-prescribing.

LONDON LETTER.

*Hospital Festival Dinners and Hospital Sunday—
Preventive Inoculation—Liquid Hydrogen—Death
of Mr. Lawson Tait.*

FOR the past six weeks the festival dinners in aid of the different hospitals have been held, and a large amount of money has been subscribed. These festivals appear to be peculiar to England, for recently Mr. Choate, the American Ambassador in London, speaking at one of them remarked that they were practically unknown in America, and that he would be disposed to advocate them on his return. Last Sunday was Hospital Sunday in London, and urgent appeals were made for contributions to the Lord Mayor's Fund. One of the first and largest donations was one of £10,000 by Mr. George Herring. Notwithstanding all the efforts made to maintain the hospitals, a number of them are constantly in debt, and making appeals for fresh donations and subscriptions. The whole question of hospital management and maintenance in London is a large one, and there appears to be a reluctance to face the difficulty. The large and increasing number of patients treated, the relation of provident dispensaries and general practitioners to the hospitals, are all matters of great importance, and will demand attention sooner or later.

On Hospital Sunday the patients in a number of the hospitals had the opportunity of listening to the appeals which were being made all over the metropolis in behalf of the Institutions in which they were lying. This was owing to the kindness of the Electrophone Company who had fitted up the instruments free of charge. The experiment was very successful, the preachers' voices being well heard; and it is probable that the instruments will be allowed to remain, and that in addition, the hospitals will be brought into connection with the theatres in the same way.

At the last meeting of the Royal Society, Dr. Haffkine, of India, read a paper on "Preventive Inoculation." Lord Lister presided, and there was a distinguished company present. Dr. Haffkine related his experience of preventive inoculation against cholera and plague in India. In the case of cholera, inoculation, effected by the cholera bacilli, was complete in four days, and a large degree of immunity to attack persisted for about 14 months. In inoculation against plague, the bacilli were killed before being inoculated. He showed by statistics the undoubted benefits to be derived from preventive inoculation, but did not wish to substitute it for good water supply and other sanitary precautions. In the discussion which followed, Professor Wright, of Netley, spoke in high terms of praise of Haffkine's work as having laid the foundation for similar methods of preventive inoculation in all other diseases when once the definite micro-organism has been discovered. Lord Lister also congratulated Dr. Haffkine on his results.

The Centenary of the Royal Institution has just been celebrated. The Prince of Wales, presiding at one of the meetings, stated that he well remembered attending, in company with his brother the Duke of Edinburgh, the juvenile lectures given at the Institution by the celebrated Professor Michael Faraday. At the closing meeting Professor Dewar, who had succeeded a year ago in liquefying hydrogen in the laboratory of the Institution, was successful in showing this "new reagent" to his audience in the lecture theatre. This was a fitting experimental triumph at the closing meeting of the Centenary. Liquid hydrogen is difficult to keep and

expensive to manufacture. It boils at 21° above the absolute zero, that is 420° below the zero of Fahrenheit scale. It is so light that a cork sinks in it like lead. The possibilities of the discovery are great, as by its use an almost complete vacuum can be produced.

The death is announced of Mr. Lawson Tait, the celebrated gynecologist of Birmingham. Three years ago he retired partly from practice, and went to reside at Llandudno, only visiting Birmingham twice a week. He took much interest in Llandudno, and only last month had purchased a large estate on Great Orme's Head with the intention of converting it into a sanatorium for consumptives, upon which he is said to have contemplated spending large sums of money.

PUBLIC HEALTH.

THE Tasmanian Central Board of Health has protested against the inaction of the Government in regard to the Vaccination Act, and by its refusal to put that Act into force, the Board being thus prevented from fulfilling the duties imposed upon it by Parliament.

Dr. J. Ashburton Thompson, president of the New South Wales Board of Health, has recently published a very interesting paper on "A System of Uniform Meat Inspection."

VITAL STATISTICS.

SYDNEY.—There were 981 births and 454 deaths registered in Sydney during June. The principal causes of death were:—Typhoid fever 6; enteritis, 11; pneumonia, 31; cancer, 33; phthisis, 38; scarlet fever, 2; whooping cough, 3. There were 7 suicides. There was one death from leprosy, the victim being a native of New South Wales, a married woman, aged 61.

MELBOURNE.—The chief causes of death in greater Melbourne during June were as follows:—Diphtheria, 6; cancer, 29; phthisis, 38; whooping cough, 5; bronchitis, 24; typhoid fever, 9; pneumonia, 49. There were 548 deaths registered during the month.

TASMANIA.—The Government Statistician's report on the vital statistics of the colony shows that during the month of June 121 births were registered in Hobart and Launceston. The deaths registered in June in Hobart and Launceston numbered 111. The deaths under 5 years of age numbered 31, or 27·92 per cent., of which 24 were under 1 year of age.

BALLARAT.—During June there were 5 deaths from cancer, 6 from phthisis, 5 from pneumonia, 3 from enteritis, 1 from typhoid fever.

NEW ZEALAND.—During June the number of births and deaths respectively were in Auckland, 105, 49; Wellington, 97, 47; Christchurch, 74, 26; Dunedin, 91, 43. Total births, 367; total deaths, 165. In the four cities there were deaths from measles, 3; cancer, 10; phthisis, 17; whooping cough, 4; typhoid fever, 3; old age, 7; pneumonia, 11.

ADELAIDE.—There were 98 births and 72 deaths in Adelaide during May. The principal causes of death were:—Scarlet fever, 3; cancer, 5; phthisis, 8; old age, 5; enteric fever, 6; enteritis, 3.

BRISBANE.—During June there were 2 deaths from scarlet fever, 2 from diphtheria; septicæmia, 4; cancer, 4; phthisis, 6; enteritis, 6.

MILITARY INTELLIGENCE.

NEW ZEALAND.—His Excellency the Governor has been pleased to approve of the appointment of James Lewis Reed as Surgeon-Captain in the Waipara Rifle Volunteers, and of Henry George Horace Naylor and James Moir as Surgeon-Captains in the New Zealand Volunteer Medical Staff.

WESTERN AUSTRALIA.—The following appointments in the Medical Department of the Western Australian Defence Forces are notified: Captain Arthur Thomas White, to be Major; Captain George Frederick McWilliams, to be Major. The following officers are posted to the medical charge of districts as follows: Lieutenant-Colonel C. B. Elliott, Geraldton; Major A. T. White, Fremantle; Major G. F. McWilliams, Perth; Captain J. M. Y. Stewart, Guildford.

LITERARY NOTES.

FROM MESSRS. ANGUS AND ROBERTSON, Sydney, we have received a volume entitled, "Causeries Familières, a Simple and Deductive French Course," by Sarah C. Boyd, Head Mistress, Girls' High School, Bathurst, N.S.W. (new edition). It is an excellent practical book, and is evidently the work of one who has had large experience in teaching the French language. It should supplant many of the absurd French Grammars now in use throughout this country.

Messrs. Angus and Robertson have also forwarded their "Guide to the Public Service Examinations," containing a key to the papers set in March last. Such a work should prove useful to those who aspire to become civil servants.

OBITUARY.

HENRY SAMUEL COOK, M.R.C.S. Eng. 1885; L.S.A. Lond. 1884; committed suicide at Redfern (Sydney) on July 23rd.

JAMES MARK MORRIS, M.B.C.S. Eng. 1860, who had practised for the past seven years at Hawthorn, Vic., is dead.

ROBERT KNOX PEACOCK, M.B., C.M. Edin. 1880; M.R.C.S. Eng. 1882, is dead. He practised in North Melbourne for fifteen years.

EDWARD WILLIAM FLEWS, L.S.A. Lond. 1848, a colonist of 37 years, died at Mount Blackwood, Vic., in June last.

W. T. CLINDENING, M.R.C.S., L.A.H.—By the death of Dr. Clindening the medical profession of Adelaide has lost one of its oldest and most respected members, and the poor of the city a friend they will find a difficulty in replacing. Born in Dublin, in 1825, and educated at Trinity College, Dr. Clindening was a typical Irishman, having all the genial characteristics of natives of that part of the emerald isle. Emigrating to South Australia in 1853, he practised in the country districts prior to finally settling in Adelaide. Soon after his arrival at the capital he was appointed an Honorary Surgeon to the Adelaide Hospital, and on his retirement he was made a Consulting Surgeon. For the last fifteen years of his life Dr. Clindening acted as Medical Officer to the Destitute Asylum and the poor of Adelaide, and in this capacity he gained the affection of the many patients who came under his care, owing to the kindly and conscientious manner in which he performed the onerous duties of his office. Always taking a lively interest in military matters, he was one of the first, if not the first medical officer in

connection with the volunteers, and was for many years P. M. O. of the forces, and retired with the rank of Deputy Surgeon General. He was a member of the South Australian Branch of the British Medical Association from its inception, and was its third president. Till the last few months of his life he was one of the most constant members at the monthly meetings. The presence at the side of the grave of Ministers of the Crown, and a large number of medical practitioners and citizens of all classes, testified to the respect in which the deceased gentleman was held.

CHANGE OF ADDRESS, ETC.

ACTON, Dr. F. C., has removed from Benalla to Yackandandah, Vic.

ALLNUTT, Dr., of Richmond, Tas., has gone for a holiday to London.

AMES, Dr., recently of Cootamundra, N.S.W., has removed to Wyalong, N.S.W.

CHAMP, Dr. J. H., has removed from Beaconsfield to Mathinna, Tas.

CHENHALL, Dr. W. T., has removed from Marrickville to Cambridge Street, Stanmore, near Sydney.

ELLIS, Dr. L. E., late of the Hospital for Sick Children, Sydney, has commenced practice at Wardell, N.S.W.

FOX, Dr. WALTER, late of the Christchurch Hospital, N.Z., has entered upon private practice.

GILLIES, Dr. JAMES, a recent arrival, has commenced practice at Halifax, Herbert River, Q.

HOGGAN, Dr. B. B., has commenced practice at Latrobe Terrace, Geelong, Vic., in succession to Dr. E. M. Wall.

HALLIDAY, Dr. J. C. W., late of the Prince Alfred Hospital, Sydney, has started practice at Rockdale, near Sydney.

HEALEY, Dr. W. J., has removed from Mount Malcolm to Wyndham, W.A.

HENRY, Dr. A., late of Narrabri, N.S.W., has commenced practice at Manly, near Sydney.

HUTCHENS, Dr. H. J., has commenced practice at Beenleigh, Q.

KENNY, Dr. F. HAMILTON, is now at The Hospital, Gympie, Q.

LEARY, Dr. W. A. E., has removed from Burnie, Tas., to Yalgoo, W.A.

MACLEAN, Dr. R., has removed from Tibooburra, N.S.W., to Kanina, Vic.

MASON, Dr. W., has removed from Coromandel, N.Z., to Steiglitz, Vic.

PATERSON, Dr. J. H., has removed from "Varuna," Hobart, to Traralgon, Vic.

SIDES, Dr. R., has removed from Cunnamulla to Charleville, Q.

SINCLAIR, Dr. HENRY, has commenced practice in Elizabeth Street, Hyde Park, Sydney.

SMYTH, Dr. S. R., has settled at Harvard, Q.

THORPE, Dr., has commenced practice at Richmond, Tas.

THROSBY, Dr. H. Z., late of the Sydney Hospital, has commenced practice at Maclean, N.S.W.

THROWER, Dr. W. B., has removed from Bulahdelah to Delegate, N.S.W.

THWAITES, Dr. J. S., has removed from Tallangatta to Portarlington, Vic.

WADE, Dr. R. B., late of the Prince Alfred Hospital, Sydney, has commenced practice at Stanmore, near Sydney.

WALL, Dr. E. MAX, recently of Geelong, Vic., has gone to Europe.

ZLOTKOWSKI, Dr. F. S. W., has removed from Moree, N.S.W., to Mungundi, Q.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced :

- Acton, F. C., M.B., &c., to be Officer of Health for Yackandandah Shire, Vic., *vice* Dr. J. Coane, resigned.
- Altmann, C. A., M.R.C.S., &c., to be Public Vaccinator at Bright, Vic., *vice* Dr. C. N. Macquarie, resigned.
- Butter, G. E., M.R.C.S. Eng., to be House Surgeon, Zeehan Hospital, Tas.
- Crooke, Dr. T. L., to be House Surgeon, Christchurch Hospital, N.Z., *vice* Dr. W. Fox, resigned.
- Dunn, S. S., M.B. Aberd., &c., to be a Public Vaccinator for South Australia.
- Franklin, T. E., L.R.C.P. Edin., &c., to be Visiting Medical Officer to Government Institutions at Parramatta, N.S.W., *vice* Dr. W. B. Violette, promoted.
- Gorringe, C. J., M.B., &c., to be Officer of Health for Green Ponds, Tas.
- Healy, Dr. W. J., to be Resident Medical Officer for East Kimberley, also to be Quarantine Officer at the Port of Wyndham, and Public Vaccinator for the Urban, Suburban, and Rural Districts of Wyndham, W.A.
- Jenkins, E. J., M.B. Oxon., M.R.C.P. Lond., M.R.C.S. Eng., to be a member of the Medical Registration Board of New South Wales, *vice* the late Dr. Maurice John O'Connor.
- Keenan, A. J. W., L.R.O.P. Edin., &c., to be a Public Vaccinator for South Australia.
- Kealy, J. P., L.R.C.S. Irel., to be Acting Medical Officer at Oroydon, Q.
- Kenny, F. H., M.R.C.S. Eng., &c., to be Resident Surgeon at the Hospital, Gympie, Q., *vice* Dr. G.ddie, absent on leave.
- Leary, Dr. W.J.A. E., to be Medical Officer of the Hospital, Yalgeo, W.A.
- MacBirtie, S., M.B., &c., to be Acting Medical Superintendent of the Beechworth Lunatic Asylum, Vic., *vice* Dr. H. A. Samson, absent on leave.
- Maclean, R. M.B., &c., to be Officer of Health for Lawlest Shire, Vic., *vice* Dr. F. Ryan, resigned.
- Maon, W., M.R.C.S., &c., to be Officer of Health for Meradith Shire, Vic., *vice* Dr. A. B. Webb, resigned.
- Miskin, Dr., to be Resident Medical Officer at Perth Public Hospital.
- Morice, R. J., M.D., &c., to be Medical Officer at Nanaango, Q.
- Park, J. S., L.R.C.P., &c., to be Public Vaccinator at Cranbourne, Vic.
- Patte-son, J. H., M.B. Ch.M. Edin., to be Medical Officer of Health and Public Vaccinator for Traralgon Shire and for Tongabie Riding of Rosedale Shire, Vic., *vice* Dr. J. P. Montgomery, resigned.
- Peipers, F. M.D., &c., to be Public Vaccinator at Wodonga, Vic., *vice* Dr. R. H. Schlink, resigned.
- Quilter, J., M.B. Melb., &c., to be Government Medical Officer and Vaccinator for District of Moruya, N.S.W., *vice* Dr. Edward Boot, retired.
- Sawrey, E. E. R. M.B., &c., to be Acting Public Vaccinator at Maldon, *vice* Dr. J. O'Neill, absent on leave.
- Seel, Dr. W. P., to be Health Officer for Burbank, W.A.
- Sprott, G. M.D., &c., to be Officer of Health for Beltana, Tas.
- Thwaites, J. S., M.B., &c., to be Public Vaccinator at Portarlington, *vice* Dr. F. W. Dickens, resigned.
- Webb, A. B., M.B., &c., to be Officer of Health for Shire of Ballan, Vic., East Riding, *vice* the late Dr. E. W. Plewa.

His Excellency the Governor of South Australia has been pleased to appoint the following gentlemen to be Medical Officers to attend to the destitute poor and aborigines within the undermentioned districts, for the year ending June 30th, 1900 :—

Aldinga, F. W. Counter; Alma Plains, F. Allwork; Balaklava, O. H. Sout; Barossa, West Ward, F. W. H. Popham; Bouleroo Centre township and radius of ten miles, E. M. Steven; Breiner (ex aborigines), W. Vernon Shone; Brighton Corporation, J. H. S. Finnis; Campbelltown, T. Borthwick; Carleton township and radius of ten miles therefrom, O. L. Straumann; Clare District, O. W. Smith; Clareland, George Woods; Coggin, J. R. Stevenson; Craters, J. Francis Souter; Crystal Brook, A. E. Bennett; East Torrens, J. Francis Souter; Behunga W. Blaxland; Kugiah, A. Feige; Gawler Corporation, F. W. H. Popham; Gilbert, F. Allwork; Glenelg Corporation, J. H. S. Finnis; Goolwa Corporation and district of Port Elliot, H. M. Shand; Grace, R. R. Frost; Hall, J. W. Yeatman; Hamilton, F. Allwork; Highercombe, W. T. Angove; Kapunda Corporation and District, E. McE. Glynn; Koonaparanga, George Woods; Laopede (ex aborigines), A. Engelhart; Laura Corporation, district of Boocoolie, and hundred of Appila, F. E. Cook; Mannum (ex aborigines), J. T. Rennie; Marion, J. H. S. Finnis; Mit. ham, A. H. Gault; Mobilong (ex aborigines), B. Smeaton; Morphett Vale, F. S. Hone; Mudla Wirra North, F. Allwork; Munno Para East, F. W. H. Popham; Munn Para West,

F. W. H. Popham; Nairne, A. E. Barratt Hine; Naracoorte, A. T. Gunning; Neales, A. Feige; Noarlunga, F. S. Hone; Onarunga (ex aborigines), W. Vernon Shone; Onkaparinga, H. Esau; Orroroo, Coomeroo, Erskine, Black Rock Plain, and Pekina, C. L. Straumann; Para Wirra, W. T. Angove; Petersburg Corporation, J. R. Stevens; Port Broughton township and within a radius of fifteen miles therefrom, J. M. Brennan; Port German township and radius of ten miles (ex aborigines), J. W. D. Bain; Rapid Bay, A. Jamieson; Melk; Saddleworth, J. W. Yeatman; Semaphore Corporation as area formerly included within districts of Rosewater and Queenstown and Alberton (now forming part of Port Adelaide Corporation) J. T. Toll; Snowtown, J. C. Kennedy; Stanley, O. W. Smith; Stirling, D. MacLachlan; Stockport, Frank Allwork; Strathalbyn Corporation, W. Vernon Shone; Strathalbyn District, W. Vernon Shone; Talunga, G. G. Nicholls; Tanunda, F. J. E. Jutson; Tatiara (ex aborigines), B. McDougall; Teatree Gully, W. T. Angove; Truro, H. Merten; Tungkillio, J. S. Proctor; Upper Wakefield, J. W. Yeatman; Waterloo, J. W. Yeatman; Williams, F. W. Counter; Woodville, W. J. Gregerson; Yankalilla, A. J. Melk; Yatala North, E. Brookes; Yatala South, M. Jay.

REVIEWS.

THE GEOLOGY OF SYDNEY AND THE BLUE MOUNTAINS.

A popular introduction to the study of geology; second edition, revised, with two maps and eighty-three illustrations. By Rev. J. Milne Curran, Lecturer in Geology and Chemistry, Sydney Technical College. Price, 6s. Angus and Robertson, Sydney, 1899.

The first edition of this work published in 1898 having been sold out in a few months, the author was stimulated to further exertion, and we have now before us the second and more elaborate edition, to which has been added two excellent maps and many additional illustrations.

This book will be invaluable to readers who wish for information regarding the geology of the land wherein they live, and though the first part of the title indicates its application to a limited locality, yet its scope is cosmopolitan, and the reading matter forms a veritable introduction to the study of the geology of the earth wherever mankind exists. A great charm possessed by this book is the simplicity of language used and the total absence of puzzling technical terms. It will be interesting to Australians to learn that we have alive in certain rivers of New South Wales a peculiar group of herrings (*Diplomastus*), the fossils of which have been found in the cretaceous and early tertiary rocks in Brazil, Wyoming, the Isle of Wight and the Lebanon, and which were hitherto considered to be totally extinct. We consider it to be the duty of every professional man, whose ambition is to be considered scientific, to thoroughly master the contents of this most admirable book; for all other classes of the community it will be invaluable.

SAJOURS' ANNUAL AND ANALYTICAL CYCLOPEDIA OF PRACTICAL MEDICINE. Vol. III. Parts I and II. Third notice.

The third volume of the above work embraces subjects from Dislocations to Infantile Myxœdema.

Quoting from our first notice of this comprehensive publication, which appeared in the *Australasian Medical Gazette*, July 20th, 1898, we then stated, "That it was claimed for these volumes that they were intended to supersede 'Sajours' Annual of the Universal Medical Sciences,' and were to be a distinct improvement on that work." Such anticipations, we are happy to be able to announce, have been amply fulfilled in the series before us.

The author in the preface to the third volume states, "That the kind reception accorded to the two first has

been the source of much gratification. It has shown that the plan of the work has met the wants of the general practitioner, while preserving for authors and teachers the leading advantages of the older annual.

The place of giving special space to subjects calculated to elucidate, by the close analysis involved, many obscure phrases of pathogenesis, has been continued in this volume."

The value of this third volume is enhanced by articles on "Infantile Myxœdema," by Professor Osler and Dr. Norton, of Baltimore; "Exophthalmic Goitre," by Professor Putnam, of Boston; and "Goitre," by Professor Adami, of Montreal. It also contains articles on "Dysentery," by Dr. Flexner, of Baltimore; on "Endometritis," by Professor Byford, of Chicago; on "Dislocations and Fractures," by Professor Flimson and Dr. Keyes, jun., of New York; on "Gout," by Dr. Levison, of Copenhagen; on "Hip-joint Disease," by Dr. Reginald N. Sayre, of New York; "Eczema," by Professor Stelwagon, of Philadelphia.

To which are added an analytical study of "Hysteria" and "Hypnotism," by Professor Eskridge, of Denver.

The illustrations are maintained at the same degree of excellence as those issued with the earlier volumes, and we confidently recommend this latest addition to the work as heartily as the foregoing volumes.

THE AMERICAN YEAR BOOK OF MEDICINE AND SURGERY, 1899. Edited by George M. Gould, M.D. (illustrated). Philadelphia: W. B. Saunders, 1899. Sydney: L. Bruck.

The American Year Book is a standing monument to the energy of our American confreres, headed by the indefatigable Dr. Gould. The contributors are mostly those of previous years, but we miss the name of Dr. William Pepper, whose death is greatly mourned. It would be unfair to point out for special mention any special article when all are well done. The most surprising fact is that the immense volume (1,100 pp.) is quite up to date, and does not contain matter several years old.

The work is well illustrated in black and white, and some full-page coloured plates are very well done.

ON THE PRINCIPLES WHICH GOVERN THE TREATMENT OF DISEASES AND DISORDERS OF THE HEART. The Lumsden Lectures, Royal College of Physicians, London. By Sir Richard Douglas Powell, Bart, M.D. Lond., F.R.C.P., Physician in Ordinary to H.M. the Queen, etc., etc. London: H. K. Lewis, 1899. Pp. 116; demy 8vo. Price, 6s.

This volume is a welcome addition to the literature relating to diseases of the heart. The lectures which it contains were delivered at the Royal College of Physicians and, we need scarcely say, were highly appreciated. Sir Douglas Powell has done a service to the medical profession in putting before its members the three lectures dealing with heart diseases, their diagnosis and treatment. Need we say the literary merits of the work are considerable?

There are two valuable coloured plates, representing diagrammatically the innervation of the heart.

GOLDEN RULES OF MEDICAL PRACTICE. By Arthur Henry Evans, M.D., B.S. Lond., F.R.C.S. Eng., House Surgeon Westminster Hospital, etc. Bristol: John Wright and Co. Price, 1s.

This little book forms the fourth number of the "Golden Rule" Series, so well known to students. The

Golden Rules are true to name, and will be found useful to the busy practitioner. They are well drawn up, and the salient points of each disease are brought out clearly and without waste of words.

The little volume measures only 4½ x 2½ inches, so that it fits into the waistcoat pocket.

AN AMERICAN TEXT-BOOK OF DISEASES OF THE EYE, EAR, NOSE, AND THROAT. Edited by G. E. de Schweinitz, M.D., Professor of Ophthalmology in the Jefferson Medical College, Philadelphia; and B. Alexander Randal, M.D., Professor of Diseases of the Ear in the University of Pennsylvania and in the Philadelphia Clinic. Philadelphia: W. B. Saunders. Sydney: L. Bruck.

This bulky text-book is the fourth of a series in process of issue, which will when completed have fairly well covered the whole ground of modern medical science. Probably it was thought desirable to keep the several volumes of the series uniform in size, otherwise there appears no very cogent reason for including the different specialties within one cover, in spite of the editors' views on their cognateness.

There are no less than sixty contributors to this work, and it speaks well for the judicious way in which the editors have done their work that there should be so little repetition and overlapping, and yet no interference with the completeness of the individual articles.

Many novel features are to be noticed, fresh ground (apart from the beaten track of the text-book monger) has been trenched on, and the work is in every way practical and up-to-date.

It is impossible here to deal in detail with so many monographs of encyclopædic fulness, but the clearly written and succinct chapters on Embryology, Anatomy, and Histology (by Pierson), and Refraction (by Jackson), and the appendices on Colour Vision with reference to Railway Service (Jennings and Thomson), the Application of the Röntgen Rays (Sweet), and Micro-organisms of Etiological Importance (de Schweinitz), are distinctive features of the Ophthalmic portion; while in the latter part of the book the articles of Blake, Bryan, and McCollom may be selected for special mention.

The illustrations are profuse, and to a large extent original. The best are those of clinical appearances taken from photographs, many of which are singularly graphic and lifelike.

As a book of reference, this work should prove of sterling value.

THE PATHOLOGY AND TREATMENT OF SEXUAL IMPOTENCE. By Victor G. Vecki, M.D. From the author's second German edition. Revised and re-written. Philadelphia: W. B. Saunders, 1899. Sydney: L. Bruck. Price, 10s.

When the first German edition of this work was published in 1889, there was some commotion in the ranks of the medical profession—both amongst young and old, and a somewhat similar feeling existed against the second edition. The author, however, finds consolation in the fact that the work has received earnest consideration from such authorities as Casper, Eulenburg, Fürbringer, Kraft-Ebing, and others. The subject treated of is one about which considerable differences of opinion exist; at the same time it is one of importance, which is too often shunned on account of its unsavoury nature. The

matter is treated in a very readable manner under the headings of Anatomy, Physiology, Etiology, Forms, Diagnosis, Prognosis, Prophylaxis, and Treatment. While there are many points on which one may differ from the author, the work is well worth the perusal of every medical man. The education of the young of both sexes as to the ill effects of onanism is a delicate matter to deal with, but at the same time it is one of great importance, and one too often neglected. The following paragraph from the chapter on Prophylaxis may well be here quoted: "The prophylaxis of impotence is closely connected with the prophylaxis of onanism, because the great majority of all those who have become prematurely impotent commenced with onanism at an early age. First of all is required a strict but loving and rational surveillance of the children. Next comes instruction as soon as the first signs of puberty appear. This instruction, however, should be given without heating the imagination and without the help of those books of horror, the so-called popular scientific works, which generally contain some piquant stories."

ON FRACTURES AND DISLOCATIONS. By Professor Dr. H. Helferich, of Griefswald. Translated from the third edition (1897), with notes and additional illustrations by J. Hutchinson, junr., F.R.C.S., surgeon to the London Hospital. London: The New Sydenham Society, 1899.

The New Sydenham Society, which has now been established for over forty years, has been particularly happy in the selection of the volume now before us. Well written, aptly illustrated, the work must commend itself not only to the specialists in surgery but also to the general practitioner, for every variety of fracture and dislocation is illustrated and described. The illustrations consist of 68 coloured plates and 126 figures in the text, drawn by B. Kellitz. It is undoubtedly one of the finest and most complete monographs on the subject extant.

The volumes of the New Sydenham Society being published by subscription may only be obtained by members of the society, but the annual fee being only one guinea with 8s. 6d. added for cost of carriage, every practitioner should become a member without delay. By subscribing for the present year Helferich's volume (which alone is worth the money), the 24th part of the Lexicon of medical terms, the 12th Fasciculus of the Atlas of Pathology, and other works may be obtained. The London agent is Mr. H. K. Lewis, 136 Gower Street, London W., to whom subscriptions should be sent.

A DISCLAIMER BY DR. JAMIESON.

WE have received a letter from Dr. Sydney Jamieson, of Sydney, explaining what may appear to have been on his part a breach against the ethical rules of the Medical Profession. It appears that he was invited by Mr. Harry Levy, Hon. Secretary of the Victoria Homes for Consumptives movement, to write in *plain English* a short pamphlet on "Tuberculosis" for distribution at the Fair now being held for the benefit of this movement. Dr. Jamieson did so, but expressly stipulated that his name should not appear attached thereto. He subsequently was informed that, in order to hasten the objects of the pamphlet, it had been published in the *Sunday Times*, and then he found that the pamphlet had been in part reproduced with his name as author appearing. He at once communicated with Mr. Levy,

who promptly responded by letter, expressing his regret that, by a mistake on the part of the editor of the *Sunday Times*, Dr. Jamieson's name appeared as author of the paper, which he admits Dr. Jamieson had especially stipulated to be withheld.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Boyd, James, Lic. Soc. Apoth. Lond. 1886; Lic. Fac. Phys. et Surg. Glasg. 1882.
Feipera, Friedrich, M.D. Berlin 1867, State Exam. Certif. Berlin 1869
Roberts, Lewellyn William, M.B., Bac. Surg. 1893 Univ. Melb. Lic. R. Coll. Phys. Lond. 1897, Mem. R. Coll. Surg. Eng. 1897.

For Additional Registration.

Munro, Andrew Watson, M.D. U. v. Edin. 1892, Lic. R. Coll. Surg. Edin. 1892, Fell. R. Coll. Surg. Edin. 1892.
Palmer, Arthur Aubrey, Lic. R. Coll. Phys. Lond. 1899, Mem. R. Coll. Surg. Eng. 1899.

NEW ZEALAND.

Reid, Stuart Bathgate, M.B., B.O. Cantab., M.R.C.S. Eng., L.R.O.P. Lond.

QUEENSLAND

Butler, Arthur Graham, Bac. Surg. 1897, M.B. 1899, Univ. Camb.
Edmonds, Henry Augustus, Lic. R. Coll. Phys. Lond. 1889, Mem. R. Coll. Surg. Eng. 1889.
Gillies, James, M.B., Mast. Surg. 1895 Univ. Edin.
Hutchens, Harold John, Mem. R. Coll. Surg. Eng. 1899, Lic. R. Coll. Phys. Lond. 1899.
Lyons, Harry Sydenham, M.B., Mast. Surg. 1879 Univ. Glasg., Lic. R. Coll. Surg. Edin. 1879, Lic. R. Coll. Phys. Edin. 1879.
Roper, William, M.A. Oxon., Lic. R. Coll. Phys. Edin. 1899, Lic. R. Coll. Surg. Edin. 1899, Lic. Fac. Phys. Glasg. 1899.
Smyth, Sydney Richard, Lic. R. Coll. Surg. Irel. 1867, Lic. Lic. Midwif. 1871, K. Q. Coll. Phys. Irel.
Sides, Richard, M.B. 1877 Univ. Melb.
Walton, William Bain, M.B., Ch.M. 1898 Univ. Syd.
Zlotkowski, Frederic Sobieski Wladimir, M.B., Ch.M. 1896 Univ. Syd.

SOUTH AUSTRALIA.

Goode, Christina Love, B.S. Melb. 1899 (additional qualification).

VICTORIA.

Carnegie, William Dalrymple, M.D. Cooper Coll., California, 1896.

Restored to the Register.

Edgelow, Samuel Henry, M.R.C.S. Eng. 1879.

Additional qualifications registered.

Graham, Charles Hunter, M.R.C.S. Eng. 1892.

As M.D. Melb. 1899:—John Francis Wilkinson, Ernest Edward Robert Sawrey, John Gordon, David Murray Morton, David McMaster Officer, Thomas Butler Kerr (a.e.g.).

As Ch.B. Melb. 1899:—William Lowe, Edward Albert Officer, Arthur Charles William Yelland, Constance Ellis, Harold Vincent Bennett, Edward Feilchenfeld, John Hodgson Natrass, Julian Augustus Romaine Smith, William Ambrose Spring, Michael Stanislaus McSweeney, James Thompson, Edward Augustus Spowers.

BIRTHS.

BIRTHS.

DICK.—On the 27th July, at Waratah, N.S.W., the wife of Dr. Robert Dick, M.O.H., of a daughter.
LAMROCK.—On the 1st August, at "Denaran," Kogarah, N.S.W., the wife of Dr. James Lamrock, of a daughter.
MILLARD.—On the 4th July, at Kenmore Hospital, Goulburn, N.S.W., the wife of R. J. Millard, M.B., of a son.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

ON ABDOMINAL HYSTERECTOMY.

By ARCHIBALD WATSON, M.D. PARIS, F.R.C.S.E.,
PROFESSOR OF ANATOMY, UNIVERSITY,
ADELAIDE, S.A.

I HAVE been requested by our courteous Secretary to make some remarks on the technique of abdominal operations, but I will limit them this evening to that employed by an absent friend (Dr. Way) in removal of the uterus by the abdominal route, and will touch briefly on those points which influence him in the methods he employs.

Were he with us, he would tell us that it would be highly presumptuous of me, or of anyone else, to lay down and mark out dogmatically any procedure which in none of its details should be departed from.

I may say that he considers amputation of the uterus at the most convenient part of the cervix preferable to pan-hysterectomy for all ordinary forms of myoma requiring ablation of the uterus.

Notwithstanding his own absolute dominion of both the ligature and the clamp methods of vaginal hysterectomy, he does not hesitate to admit that for cancer of the uterus the abdominal route should be preferred.

If it is necessary to dissect the axilla in cancer of the breast it ought also to be necessary to dissect the pelvis in cancer of the uterus.

Such a course in Australia was first advocated by Dr. Thring, but he never gained any disciples. Dr. O'Sullivan practises isolation of the cervix with ligation of the uterine vessels from the vagina, and then finishes the operation from the abdomen.

In Adelaide the sequence of events is reversed, because knowing we can more accurately define the vaginal limits of the growth from below, and that we can only dissect the parametrium and pelvic glands from above, we open the abdomen first and cut off the blood supply, and do all we have to do there, leaving the trifling complementary vaginal part of the operation for a future occasion.

In the operation I am about to describe there is no preliminary curetting, cauterizing, or closing the resulting cervical excavation; other-

wise the surgeon might be tempted, when he neared the end of the abdominal operation to misjudge the operative tolerance of the patient and finish the operation in one sitting, especially if an all too confident anaesthetist nodded approval. The extra risk of a septic vagina, however, will deter him, especially if he knows that he can render the cervical stump innocuous as regards contact-contamination and vascular (blood or lymphatic) transference. Another point is that the more the uterus is drawn upwards out of the receding angle of the converging ureters, the less liable are the latter structures to injury, the reverse is the case if the uterus is pulled down as in vaginal hysterectomy. By the abdominal route the ureter can be easily located under the inner edge of the posterior horn of the trans-pelvic incision of the peritoneum, and can be put gently on the stretch as the dissection proceeds, and be followed right up to the bladder without injury. Also, that all the blood vessels concerned are more satisfactorily ligatured if they have first been exposed, than by going blindly, and tying them with instalments of broad ligament.

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DIAGRAM TO ILLUSTRATE PROFESSOR WATSON'S PAPER.

1. Round ligament. On the left side it is cut adrift with its vessels (funicular). On the right side it is embraced in a mass ligature at uterine os.
2. Infundibulopelvic fold. On the right side it is embraced in a mass ligature of the upper segment of the broad ligament.
3. Ovarian vessels exposed.
4. Ovary.
5. Bladder.
6. Uterus.
7. Ureter passing beneath uterine vessels to reach bladder.
8. Site of the preliminary clamping on uterine vessels above their vesical and cervico-vaginal branches.
9. Site of the preliminary clamping on ovarian vessels.

The easiest way to uncover the vessels is to initiate proceedings by cutting the round ligaments free about one inch from the uterus, and

enlarging the incisions thus made in the anterior blade of the broad ligament outwards along the ovarian vessels till the external iliac artery is reached, then follow the ovarian vessels upwards, on the left side into the meso-sigmoid, and on the right side nearly to the cæcum. The superior hæmorrhoidal, the ovarians, the uterines, the iliacs, and even the aorta itself, are then under control, and when the remaining bridge of peritoneum between the two round ligaments has been divided on the finger, pushed across behind the bladder, the vesical branches of the uterine are added to the list.

In the Trendelenburg position the uterus is pulled up with a curved (Worrall's) single-tooth volsellum, and after having uncovered the vessels as above described and tied them off (ovarians) at the pelvic brim, and placed clips on the uterine cornua for reflux hæmorrhage, and cut the posterior blade of the broad ligaments as far as the utero-sacral ligaments, the operator can do one of two things—he can glide a double ligature under the main trunk of the internal iliac artery (look out for the external iliac vein in doing this), or he can tie the anterior division only of the internal iliac artery and thus command its branches, the uterine and vaginal arteries. This manœuvre is accomplished by drawing on the obliterated hypogastric artery, which is found by looking at the umbilicus. As the artery can be drawn clear of the veins as far back as its sciatic branch, it is perhaps better to cut the vessel between two clips behind this artery, and replace each clip at once with a ligature; this saves passing an aneurism needle.

The uterine veins carry their own blood and that of the previously ligated ovarian veins back into the general circulation (auto-infusion), and render the further dissection comparatively bloodless.

The uterine arteries should be tied separately at their origin (as I have seen one coiling a little even after ligature of the internal iliac), and cut free and removed with the parametric connective tissue and veins; the uterus, the meanwhile, is pulled to the opposite side. The glands along the external iliac and those in its delta (external iliac and hypogastric set) are removed, also those in the delta of the aorta (sacral). You require a special dissector to do this; some call it a stripper.

When this is done the uterus is pulled up, and the finger pushed down between the cervico-vesical ligaments (which correspond to the utero-sacral ligaments behind) as far as the vesical ends of the ureters which run beneath these ligaments.

If this median plane refuses to open out, the cancer has extended through the vaginal wall, and you must not hope for a definite cure. Nevertheless, I know a lady who for the last nine months has enjoyed a painless life where this unfortunate condition was present. In her case hysterectomy was supplemented with bilateral ligation of the main stem of the internal iliac (behind the gluteal). This appears to have retarded the progress of the disease.

Some gauze is now packed between the base of the bladder and the vagina. The uterus is pulled over the pubis, and cut off without opening the posterior fornix. An aristol gauze pad is immediately placed over the stump, which is telescoped into the vagina, and, with its gauze cap, covered over with the pelvic peritoneum, leaving, however, a weak spot in the symperitoneal suture line in Douglas's Pouch, where great care must therefore be taken to bring the utero-vesical edge of peritoneum in contact with the rectum by utilising the cut utero-sacral ligaments as holding ground for the utero-vesical or anterior blade of peritoneum.

The abdomen is then closed in one layer, as time is usually of paramount importance in such cases.

Five days later the vaginal cervix with the vaginal fornices are removed with the two gauze pads, which are now replaced by a single gauze strip loosely packed (concertina fashion) above the vagina.

HYSTERECTOMY FOR MYOMA, &c.

In operating on myomata of the uterus ether is preferable to chloroform, because in stimulating the circulation it tends to fill the immense veins (always a source of danger), and thus renders them prominent and easier of bloodless isolation. For those who prefer pedicle needles and mass ligatures chloroform "*ceteris paribus*" should be used, as the veins are less liable to be tapped in the depths of the tissues.

Dr. Way says, open the abdomen as near the linea alba as possible. I have often been struck with the tattered appearance of the right rectus muscle after delivery of a big myoma through its substance, and I have seen the deep epigastric divided more than once by advocates of that method, who believe that the damage may be neutralised by what they term the ideal or triple layer method of closing the abdominal wound.

How can the edges of the tough and static aponeurosis in front of the rectus muscle be efficiently lashed together if each loop includes the subjacent tender and dynamic muscle tissue?

The muscle always tends to herniate between the stitches like a row of fine beads. Immediate detection of subsequent accidental diastasis of the so-called musculo-aponeurotic layer (which I have cause to remember) is masked by the extra care taken in the coaptation of the cutaneous layer. In a fat woman I have seen 15 oz. of unsuspected brown pus under the skin sutures left fifteen days because they were apparently causing no trouble. If two animals are shot in a corresponding non-vital part, the one with a bullet and the other with an arrow, the betting is distinctly in favour of the animal shot with the bullet, because its muscles are not skewered and immobilised as they are in the less fortunate arrow-stricken creature.

When the abdomen is entered, it is necessary to bear in mind that if damage is inevitable on account of adhesions, the uterus and its adnexa should suffer first, then the bladder, then the large intestine, then the small intestine, and last of all the ureter and the external iliac veins.

It is manifestly a loss of time to commence by untwisting a rotated uterus, or tearing posterior adhesions with the fingers, as both of these conditions are more simply dealt with after the broad ligament has been opened. In a twisted uterus one round ligament is sure to be in front, and this is a favourable factor in the case, as it can at once be attacked and the ovarian vessels of that side controlled before delivery of the tumour. If it is neither incarcerated nor adherent it may be delivered at once in its smallest diameter, and removed in six to eight minutes. A sailmaker's hook causes less bleeding than the usual giant volsellum with its multitude of teeth. But if the tumour is over 20 lb. in weight a small block and tackle with a big meat hook is necessary to steady it during delivery and prevent it from slipping and causing irreparable damage. As soon as the tumour begins to suck in passing the abdominal strait the patient should be hoisted into the Trendelenburg position, both to prevent syncope from altered abdominal pressure, and to displace the bowels out of the field of operation.

A warm moist folded towel is moulded into the abdominal wound, after which, to repeat the beautiful words of Greig Smith, "Nowhere is the knowledge and loyalty of a capable assistant more conspicuous than in the jealous protection of the bowels beneath."

One round ligament is now drawn forward, double clipped and cut about an inch from the tumour (uterus), thus exposing the utero-ovarian plexus of veins like an immense

varicocele, freely movable on the posterior blade of the broad ligament. The rhomboid opening thus produced in the anterior blade is enlarged outwards past the pelvic pole of the ovary, where the vessels are all gathered up in a bunch and double clipped with Howard Kelly's clamp forceps, and cut. The same manoeuvre is repeated on the alternate side. The operator, if afraid of too many clips, may now replace the distal clips on the ovarians and round ligaments with fine silk or tendon ligatures.

The posterior blade of the broad ligament on both sides is divided as far as a large outlying vein towards the side of the uterus. This is not a true uterine vein, because it comes up from behind the ureter, and connects the vaginal with the ovarian plexus. When empty, I have seen it mistaken for the ureter. I think it is larger in a pregnant uterus, "*ceteris paribus*," than it is in a myomatous one.

The operator can now do one of two things—he can place Howard Kelly's bent clamp forceps on the uterine vessels against the side of the cervix (including the vein just mentioned) and throw the tumour over the pubis and cut the cervix across from behind, rolling the tumour off the bladder from below, and finally dividing the utero-vesical fold of peritoneum, or, better still, he inserts his finger under the above-named fold between the two round ligaments (thus placing the bladder in safety), and then divides it on his finger. There is no necessity to push the bladder down with a sponge in high amputations, and there is never any use in trying to strip any peritoneum from the back of the uterus to form a flap which is not needed.

The cervix is now severed from iron to iron by a circular cut which cups or cones out the cervix; indeed, if the operator doubts the asepsis of the canal, he can hollow it out (*à la* Worrall) right down to the os, and then stuff it with a gauze strip, one end of which is in the vagina; this has all the advantages of a pan-hysterectomy, with none of its disadvantages. I have seen it done unintentionally once or twice, where, in the endeavour to produce a saucer-shaped surface the operator produced a funnel-shaped one.

The cervical stump is now seized with a single tooth volsellum, and its anterior and posterior edges, including peritoneum, are lashed together with strong raw tendon deeply passed, the median stitch being well clear of the gauze with which the canal is stuffed. The clamps

on the uterine vessels are replaced with a sharp fine silk ligature, or if the operator can differentiate the artery from the veins it is better tied separately with a wallaby tendon, as less of a dog's ear is left at the side of the cervical stump. Ligatures are only tightened "ad maximum" as the clamps are loosened and removed.

The gaping broad ligaments are now closed. The round ligament is included in the two outermost stitches near the dimple marking the position of the tied ovarian vessels, this shortens the wing of the symperitoneal suture.

On the left side where the infundibulo-pelvic fold is so often flattened out and merged in the meso-sigmoid by the cicatricial contraction which is so common at that point in adult females, the resulting pedicle by transfixion resembles a mushroom, from the necessarily excessive inclusion of peritoneum directly continuous with the meso-sigmoid, more or less of a traction bend is produced in the bowel, the vascular and nervous supply of which are also interfered with, and a condition tending to aggravate, or even produce obstruction, is established. I possess a specimen illustrating this condition, which was, however, rendered more pronounced by the operator (dubious of his mushroom pedicle) applying another ligature by transfixion outside of the first (supplementary ligature), thus further puckering the meso-sigmoid and injuring one of its veins, and only missing the left ureter by a hair's breadth. The last straw was the further drawing upon the resources of the meso-sigmoid in order to cover over the knob-like ovarian pedicle.

It was fear of such complications rather than regard for ovarian function which prompted the leaving behind of a portion of ovary, which was embedded in the intersigmoid fossa. It doubtless received its blood supply from the gut, because the patient *œt.* 41, has menstruated regularly ever since (fifteen months).

The pedicle formed by ligation of the uterine vessels, if excessive is reduced with similar dangers, puncture-bleeding being common. I have also read of an operator who kinked both ureters by including too much in the ligatures. He removed the ligature forty-eight hours later, and saved the patient's life.

He stated that the uterine artery did not require re-tying, but that the veins projected from the re-opened pelvic floor, and were thrombosed. I think he is in error here, because veins empty themselves at once. I have had several opportunities of verifying the prompt thrombosis of the uterine arteries after ligation.

In trying to stop bleeding by transfixing and re-tying uterine vessels I have seen the ureter pricked, and I can easily imagine if the bunch of (uterine) vessels was drawn too far into a ligature that the ureter might find itself pinched (in the position of an old mare I once saw dead, with her neck caught in the fork of a tree), because of the large vein previously mentioned behind the ureter being bunched with the uterine artery and veins in front of it.

In dealing with asymmetrical tumours where one side is inaccessible, commence with the round ligament of the accessible side, and after ligation of the ovarian vessels inside the broad ligament on that side, finish the operation as practiced by Dr. Howard Kelly.

The reason why his clamp forceps in the hands of ordinary surgeons should be placed on both uterines, where it can be done, is that it saves time and venous blood from pricking, and ensures symmetry in the section of the cervix. Cutting the round ligaments at corresponding points ensures symmetry in the symperitoneal suture line.

In the side to side operation I have seen one operator cut the opposite round ligament at the internal inguinal ring. I have also seen the vagina entered and the opposite uterine cornu cut off in the endeavour to steer straight across. With iron landmarks such mistakes cannot happen.

In conclusion, I have to thank my friends, Drs. O'Sullivan, Worrall and Thring, for the many opportunities they have afforded me of witnessing their operations, and thereby increasing my knowledge, not alone on the subject of this paper, but in dozens of other directions.

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REMARKS ON THE PRECAUTIONS NECESSARY IN THE ADMINISTRATION OF ANÆSTHETICS.

BY ALFRED SHEWEN, M.D. LOND., CONSULTING PHYSICIAN, PRINCE ALFRED HOSPITAL, SYDNEY.

TAKING chloroform may be rendered much more pleasant and safe if certain precautions be observed. It is commonly remarked by patients, "Oh! it is not the operation I dread but that horrid chloroform." If, then, it be true that by observing certain rules we can render the administration of anæsthetics more pleasant to the patient and less dangerous to life, it is our duty to observe them.

The art of giving chloroform is to know when the patient has taken just sufficient—and no more—chloroform to keep him perfectly still under the operation. To give a great deal more of an anæsthetic than is necessary is just as ill-judged and dangerous as it is inconvenient to give too little and to have the patient kicking about during the operation. The great difficulty with all beginners is to keep the patient at a proper stage of anæsthesia; he is either too deeply anæsthetised, or he is not enough so, only by extreme watchfulness and attention to certain rules can this fault be remedied.

No food should, if possible, be taken during the two hours immediately preceding the administration of an anæsthetic. If a patient be very cold and nervous, about one ounce of brandy with water may be given shortly before the operation.

The patient should, if possible, be properly prepared by the administration of a purgative the day before an anæsthetic is to be given.

The best of all positions for the patient is flat on the back without any pillow. This cannot always be accomplished at the outset, but when a patient becomes unconscious, pillows, etc., may be removed.

Remove any artificial teeth which can slip into the trachea.

Observe the normal condition of the pupils; some pupils are normally almost pin-pointed, others the reverse.

Observe the condition of the pulse; it will always be abnormally fast, owing to the nervous condition of the patient, but its force and rhythm will be unaltered. A flabby, nerveless pulse without any life in it, requires ether in place of chloroform as a rule.

Ascertain the nature of the operation to be performed before starting with the anæsthetic. Some operations require a much deeper anæ-

thesia than others. If complete relaxation of all voluntary muscles be required, more especially those of the abdomen, anus and vagina, we must get a much more intense anæsthesia, the conjunctival and the pupillary reflexes must be nearly, if not quite, abolished. On the other hand, if an operation merely causes pain, a sufficiently deep anæsthesia will be produced if the conjunctival reflex has become sluggish. If a patient has been under an anæsthetic for some time, the depth of anæsthesia required to keep him quiet during the operation will be much less; in other words, chloroform appears to have an accumulative action; ether has scarcely any (if any) at all.

There is no doubt that ether acts as an irritant to the mucous membrane of the air passages, and that it sometimes causes a great accumulation of frothy mucus in the air passages such as to almost block inspiration and expiration. When such is the case we must resort to chloroform, but it is well to bear in mind that patients under ether will not stand much chloroform; when ether is replaced by chloroform, this latter drug must be given with the utmost caution. On the other hand, a patient under chloroform takes ether very well. With shallow respiration and a falling pulse it is sometimes necessary to revert to ether when giving chloroform.

It is always a wise precaution to enquire whether a patient has taken an anæsthetic before, and if so, what kind. Some patients take chloroform so badly that we are very glad to be forewarned.

The character of the pulse is a great indicator of the circulation, and should always be carefully examined previously to the heart sounds. If, with a weak, nerveless pulse we have toneless heart sounds with or without murmurs, it is always safer to use ether.

Do not give ether to a patient with any affection of the bronchial tubes.

When using chloroform do not place the inhaler too close over the face, it is very easy to give chloroform without causing the slightest distress or inconvenience by holding the inhaler away from the face, say about one inch, so as to permit the admission of abundance of air. If this be done drowsiness will soon follow and we may gradually bring the inhaler closer to the face and produce the amount of anæsthesia required without the slightest resistance and without loss of time. I find the ordinary wire frame inhaler with two folds of flannelette most convenient. When giving ether to very nervous patients, it is still more necessary to

begin very gradually, as ether is so much more irritating to the air passages than chloroform. When the patient is drowsy the regulator (of Clover's apparatus) may be pushed round to 1, 2, or even 3 pretty quickly, if there is not much irritation, and short operations such as teeth extraction may be performed very easily, and a rapid recovery will take place almost as quickly as that from gas.

The use of the air bag will be found to facilitate rapid anaesthesia, but to make the utmost use of it, it must not be tilted far off the nose during the inspiration.

When giving pure chloroform it is well to note the character of the respiration; full, deep inspirations cause a very rapid anaesthesia, and if not watched a very deep anaesthesia may occur sooner than expected.

It is also well to bear in mind that there is a remarkable difference between people as to the amount of chloroform required to produce a proper anaesthesia. Some persons require an amount of chloroform which given to another would be pretty well lethal. The way in which some persons will drop through every stage of anaesthesia is sometimes very startling.

There is also a remarkable difference in the rapidity with which different persons recover their reflexes, out of all proportion to the amount of chloroform they have taken. I think those persons who are slow in recovering their reflexes require particular care in the administration of anaesthetics to them. I believe that the difference in the quantity of chloroform required to produce anaesthesia in different individuals is one of the main sources of danger. The conjunctival and the pupillary reflexes are the only quantitative guides which we possess in the administration of anaesthetics. Both of these reflexes are more active when both eyes are tested at once; there may be a complete absence if one eye only be tested, but the reflexes may be quite apparent if both are tested at the same time. The conjunctival reflexes may be quite easily tested without touching the conjunctiva with the finger, the resistance of the lids is quite sufficient. When anaesthesia has advanced so far as to cause a sluggish conjunctival reflex, the patient is ready for the majority of operations, only those operations requiring the complete relaxation of the voluntary muscular system being the exception. The pupillary reflex disappears before loss of conjunctival reflex, but the pupil does not become insensibly dilated until the conjunctival reflex has completely disappeared. A patient anaesthetised until there is an absence

of conjunctival reflex and an insensible dilation of the pupil, is in a most anxious condition. Never continue to give chloroform or ether when there is an absence of conjunctival reflex and a dilated pupil. There may be an absence of conjunctival reflex during deep sleep accompanied with some anaesthesia, but the pupil under such circumstances will be tightly contracted. When this is the case it is much better to rouse the patient by pinching him, when the pupil will dilate and become sensible and the conjunctival reflex will return. If an operation be attempted whilst the patient presents these symptoms it is quite certain there will be some struggling and inconvenience.

The most difficult question which an anaesthetist has to decide is when to give more chloroform during the course of an operation. We cannot afford to wait until the patient begins to move, for then the operator will fall out with the anaesthetist; but a patient must be kept quiet all the time, whatever is being done; sometimes more than to be kept quiet is necessary if deep palpation of the abdomen is required. We must be guided by the activity of the reflexes as to when more chloroform is or is not required; if we observe that the reflexes are becoming more and more active in the course of an operation, and that the pulse and respiration are normal, there need be no anxiety in giving more chloroform; it is by watching this wave of activity in the reflexes, and judging therefrom of the need or not of more chloroform, which enables us to keep the patient at the exact stage of anaesthesia required.

HYDATID CYST SIMULATING CYSTO-FIBROMA OF THE UTERUS.

BY A. WATSON-MUNRO, M.D., F.R.C.S. ED.,
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THE following case is of some interest from a diagnostic standpoint. Late one evening in June of the present year, I was called to attend Miss S., *æt.* 26, suffering from a sudden attack of retention of urine, which had to be relieved by catheter. The bladder empty, a tumour, apparently cystic, could still be felt above the pubis. Several days later the attack was repeated. I ascertained that the patient believed she had been able to feel the lump as early as eighteen months previously, certainly a year ago. For the same length of time she had been troubled with frequent micturition.

For the last six months she had had metrorrhagia, marked pre-menstrual pain, and had repeatedly passed small clots during menstruation. A few days later, she was anaesthetised and examined. The tumour was found in the hypogastrium, nearly reaching the umbilicus, somewhat more prominent to the left of the middle line; *per abdomen* it felt distinctly cystic. *Per vaginam*: the cervix was rather low, directed forward, nulliparous; in the posterior fornix, a solid, elongated body could be followed backwards into the sacral hollow. On bimanual examination, cervix and abdominal mass were found to be continuous and, as it were, fused together. Feeling in the anterior fornix, and simultaneously percussing the abdominal wall, one got the impression of a fluid "thrill." The whole mass was to a considerable extent movable from side to side, the cervix following its movements. To make sure of the position and size of the uterus, the sound was passed, pregnancy having been easily excluded, and ran in a backward direction for four inches and a quarter.

The diagnosis, after dismissing the possibility of early pregnancy and ovarian cyst, seemed to lie between fibro-cystic tumour of the uterus and hydatid cyst. On the whole, the evidence was in favour of the former; the presence of a cyst closely associated with the uterus, the history of metrorrhagia, of sudden retention (sufficiently common in the course of a fibroma) and especially the abnormal length of the uterine cavity. On the other hand, the thrill (somewhat questionable) and the low level of the cervix pointed to hydatid. In the interim of fourteen days between examination and operation, the tumour palpably increased in size, and its cystic character came more and more in evidence on palpation; this appeared rather to turn the scale in favour of hydatid.

On 25th June after due preparation, I opened the abdomen, assisted by Drs. Neill and Steel. A large tough cyst was found, extensively adherent to the omentum, and having the bladder drawn up on its anterior surface. It occupied the entire round of the pelvic brim. While adhesions were being separated, it burst, and hydatid fluid escaped. The site of the cyst was the sub-peritoneal connective tissue of the utero-vesical space. As it expanded, it had raised the peritoneum, carried the bladder upward, and pushed the uterus down into the hollow of the sacrum. The cause of the lengthening of the uterus was not clear—it appeared to be mainly in the supra-vaginal portion of the cervix. The appendages were healthy. The patient made a good recovery.

THE NOTIFICATION OF OPHTHALMIA NEONATORUM.

By F. ANTILL POCKLEY, M.B., CH.M. EDIN.,
HON. OPHTHALMIC SURGEON TO THE PRINCE
ALFRED HOSPITAL, SYDNEY.

WITH the single exception of optic-atrophy which moreover generally attacks people comparatively late in life, ophthalmia neonatorum is by far the most frequent cause of blindness. According to various statistics, the proportion varies between 15 and 50 per cent. In Fuch's work on the "Causes and Prevention of Blindness" published in 1885, the prize essay of the Society for the Prevention of Blindness, the proportion of blennorrhagic blindness in the asylums of Germany, Austria, Denmark, Holland, Paris, etc., is given as 40 per cent. It is not quite clear whether that includes blennorrhœa in adults. Although since that date, the general adoption of proper methods of prevention in lying-in-hospitals has considerably diminished the disease, ophthalmia neonatorum is still the most frequent cause of blindness. The usual estimate of the proportion is about 25 per cent.

Although we have no local statistics on the subject, it is evident from the large number of neglected cases that turn up at the hospital out-patient department, that the disease is very common in this city.

These cases are pitiable. The baby is generally not brought until the disease has run for a week or more. The mother is only then able to leave her bed and come to the hospital in defiance of the midwife, who has all along protested that it was nothing but a cold to be treated by the application of a few drops of breast milk. Often by this time one or both corneæ have been destroyed, and the child doomed to perpetual blindness; or short of absolute ruin, the sight is so seriously damaged as to heavily handicap the patient through life. The pity of it is, that if proper methods had been carried out from the first, in scarcely any case, would permanent damage have been done. As these neglected cases occur mainly amongst the poor and ignorant, and as the resulting blindness is from infancy, very generally the State has to bear the burden of these helpless people for long periods, so that from commercial as well as humanitarian reasons, it behoves us to do whatever is practicable to check the disease.

According to Burnet, in Norris and Oliver's System of Diseases of the Eye (1898) there are 15,000 people in the United States asylums blind from this disease. He goes on to say,

"Taking the cost of maintenance of a single person, according to the statements of our best regulated asylums, as, at the least, 132 dollars (about £27) per annum, and the average nett earnings of a single able-bodied person at one dollar (four shillings and twopence) a day, we find that the total loss to the Commonwealth of the United States from the ravages of this disease reaches the sum of 7,500,000 dollars (roughly £1,500,000) annually.

Now, unfortunately, outside public institutions and lying-in homes instruction in prophylactic treatment has not borne much fruit except where a qualified accoucheur has been in attendance. In this legislatively belated country, any woman is allowed to undertake the duties of a midwife, and it is by these ignorant women that the harm is done. Not only are they unconscious of the serious nature of the malady, but are so grossly ignorant and obstinate that when the mother begins to have misgivings, they ridicule the idea of calling in a doctor.

There being no apparent likelihood of the practice of midwives being regulated, it occurred to me that the difficulty might, to some extent be overcome by including ophthalmia neonatorum in the list of diseases compulsorily notifiable. On my broaching the matter to the President of the Board of Health he suggested that I should bring it up at a meeting of the British Medical Association, for an expression of opinion. It appears that the present machinery is inadequate for the carrying out of the necessary details, but I understand that if a recommendation came from the British Medical Association to adopt the course named, it would doubtless be arranged.

This is my reason for inviting the attention of members to the subject. I take it that this is a matter unassailable by the criticism generally bestowed on ophthalmic papers of having no interest for the majority of the members. Probably everyone present has at some time or other, had trouble over neglected cases of ophthalmia neonatorum and as likely as not, has been blamed for results for which he was in no way responsible. People so like shifting the blame of their own neglect on to others, especially doctors. One of the uses of the present-day doctor is that of being a convenient and silent scapegoat. This alone might be a justification for his existence.

My suggestion is that it should be made compulsory for the parents, householder, midwife, one and all, to report immediately to the local authority every case of discharging eyes in a newborn baby. In most European countries,

and most of the States of America, this is compulsory. In Germany in addition to being compelled to notify, the midwife is forbidden to treat these cases. Slowgoing Great Britain has not yet moved in the matter, but even there the profession recognises the duty of doing something, and it is a common practice for notices to be distributed by Infirmarys and Dispensaries in something like the following terms, which is the formula of the Sheffield General Infirmary:—

"When the baby's eyes begin to look red and to run matter, take it at once to a doctor. It is very dangerous, and unless treated properly one or both eyes may be lost."

There would be no popular objection to compulsory notification. It has to be admitted that cases are not always of gonorrhoeal origin. The serious results are due to ignorance. That mothers would be only too ready to have such a simple way of saving themselves from the reproach of having, by neglect, allowed their children to go blind, is proved by the anxiety they show, and the trouble they will go to, to have the disease treated, when once they comprehend its dangers.

As to the procedure after notification, that would be a matter for the authorities to arrange, and is beyond my province to suggest.

(For discussion on this paper see page 471.)

HEMIANOPSIA (?) CORTICAL AND EMBOLIC.

BY E. KEN HERRING, M.R.C.S., L.R.C.P., SHEPPARTON, VICTORIA.

MRS. G., *et. 36*, seen February, 1898.

Previous History.—Patient had two children and was healthy and well till twelve months ago, when suddenly hemianopsia came on. She was on her knees dusting the floor when she suddenly lost her sight altogether for a few minutes, there was a great swimming sensation in the head which lasted two days, no pain, no fainting. At this time she was five months pregnant with third child, had occasional fits of depression. About six weeks after, she miscarried, when paralysis of left arm and leg came on, the face appeared swollen and disfigured (? paralysis), and speech was interfered with so that the words were indistinct, no pain, kept in bed two weeks. Paralysis of leg passed off, and that of hand much improved, but the hand was numb and cold and finger movements weak. About two weeks after getting up, the fits of depression being more frequent, she was alarmed by one of the children getting scarlet fever, and a bad attack of depression with confusion of ideas resulted.

Improvement took place on being put back to bed, but occasional attacks of "swoonings," weakness and depression, with lack of concentration of thought, lasted some months, during which she was seen by several doctors who diagnosed hysteria. The eyes were examined in May, 1897, and again in January, 1899, by Dr. Gault whose notes I give below.

Present History, February, 1898.—I was called in on account of dragging pains in pelvis and back, metrorrhagia, dyspareunia, and general weakness. Patient had a startled expression, and when she looked at one tilted her face obliquely, protruding the chin so as to look through the corners of her eyes. There was twitching of the left corner of mouth when speaking, and a tremor in the hands and altogether a general expression of nervous debility. Cheeks red, pupils equal, rather small; tongue clean, teeth carious, some inco-ordination of hand movements, finger tips bloodless. Pulse, small, irregular and intermittent, with sharp fall. No brachial or carotid pulsation visible. Cardiac impulse diffused, apex beat in anterior axillary line quite two inches down and out from normal. Cardiac dullness extended to mid-sternum. Loud, rough, crunching, systolic sound with blowing murmur masking second sound at apex. Over aortic area blowing diastolic murmur, but owing to the irregularity and intermittence the whole cycle was confused.

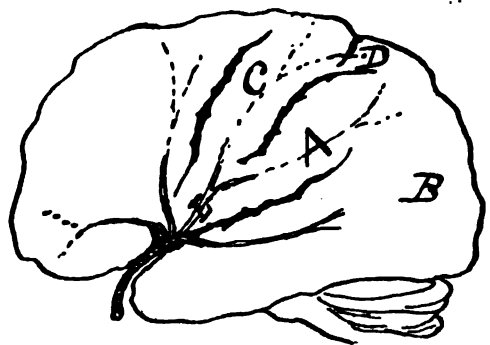
Per Vaginem.—Cervix severely lacerated, uterus acutely retroflexed and verted into Douglas' pouch, where it was firmly fixed, and any attempt to move it gave pain. Sound inserted by acute curving showed elongation.

Progress.—Under rest, cardiac and general tonics and glycerine tampons, the health improved steadily; uterus became movable, menstruation regular, pains ceased, but the sight and the power in the left hand remained apparently the same. My attendance died off gradually. In December, 1898, I was called again on account of "swooning" attacks when a note to the following effect was made—left hand wasted and not so firm as right, grasp feeble on left, sensation good, motion improved slightly. Patient cannot read or sew for any continued time. Pulse, regular, 100. Right radial fuller and firmer than left. Pulsation noticeable all over cardiac area into axillary line; pre-systolic thrill at apex, apex still in anterior axillary line. Pre-systolic rough bruit at apex with diastolic blowing murmur at nipple, which is lost on tracing it to aortic area or to apex. Aortic sounds good; diastolic

murmur over pulmonary area; supra-sternal pulsation, but no tracheal tugging. Lung resonance good all over, but respiration is "cog-wheel" all over left side. Since then improvement has been steady. Patient has lost her depression, is able to visit and attend social functions, and is generally much healthier and stronger; but she has to avoid continued reading or sewing, and still looks at one corner-ways though not so markedly.

Note by Dr. Gault.—Mrs. G.'s visual field was taken in May, 1897, and again in January, 1899. There was complete left hemianopsia together with marked limitation of right field of vision also. The central region as is usual was practically unaffected, vision being six-ninths in each eye, and there is an overshoot field extending in places as far as five degrees to the left of fixation point. The limitation of the right fields is less marked in the later than in the earlier charts, but there is no restoration of left fields.

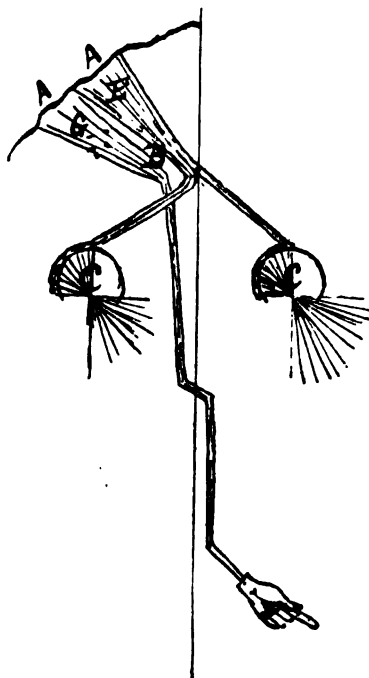
Diagnosis.—There seemed to me no doubt between hysteria and embolism, the cardiac symptoms (which, by the way, had apparently been overlooked by the hysteria diagnosticians) proclaiming loudly for embolus. The only question was: Where is the lesion? A lesion causing homonymous hemianopsia must be either in the optic tract, the internal capsule, the cortical centres for vision, or the white fibres leading thereto. According to Ferrier, the cortical centres for vision are situated in



the supra marginal (A) and occipital (B) convolutions (see diagram). Adjoining the supra marginal convolution, we have the ascending parietal convolution (C) and the superior parietal convolution (D). The former of these (C) locates the region of cortical centres for the movements of the wrist and fingers and retraction of angle of mouth of the opposite

side of body, while the latter (D) represents the leg and foot. These three convolutions (A, C, D) are supplied with blood by the ascending parietal branch of the middle cerebral artery (x in diagram), and it seems to me no mean assumption to assume that in this case this vessel has two branches, one supplying the supra marginal convolution and one the ascending and superior parietal convolutions. With that assumption the diagnosis becomes easy. An embolus lodged in the visual or supra marginal branch of the artery, a thrombus supervened, which a few weeks later resulted in a blockage of the motor or superior parietal branch, and, finally, that this thrombus subsequently either became partially absorbed or, more probably, the arterial supply has been partially performed by some other vessel.

A further diagram may help to demonstrate



the lesion and effect. (A) is lesion in right cortex (B) internal capsule, the visual fibres (x) leading through it to the eyes (C) and supplying the right side of the retinae. The motor fibres (D) pass through internal capsule, decussate in mid-line and supply left hand and wrist.

One further point of interest is that I could get no past history of cardiac trouble.

SALINE SOLUTION (Na. Cl.) IN PUERPERAL ECLAMPSIA.

By S. SMITHSON DUNN, M.B., C.M., ADELAIDE, SOUTH AUSTRALIA.

On August 11th, 1899, attended Mrs. M. C., aged 25 years, at her second labour. When first seen, patient was suffering from epileptic convulsions; ascertained she had been in labour about three hours, and had slight fits off and on during her pregnancy. On examination, the ankles and legs were swollen and pitted deeply on pressure. A very little urine passed previous to labour pains, which showed a large amount of albumen. The os uteri was well dilated, the pains strong at long intervals, head presenting "position normal." Thought it desirable to use forceps; had no difficulty in ending labour quickly, and the *placenta* was removed by compression twenty minutes after the baby (girl) was born, the vagina and cavities well washed out with solution of corrosive sublimate (1-1000), discharge normal in quantity. At end of labour convulsions entirely ceased, but in ten minutes they commenced with great violence. Chloroform was inhaled from handkerchief and an enema given; *improvement*. Then made her swallow 20 grs. pot. bromide and 10 grs. chloral hydrate and remained for nearly an hour; the convulsions had almost ceased and patient began to settle down. One and a half hours afterwards was called to visit her again. Found the convulsions much worse and persistent, and patient half conscious. Tried compression of both carotids for a few minutes, which certainly improved matters. Did not push the question of venesection, as it was unfavourably received. Proceeded and subcutaneously *injected* about half a pint of saline solution (about 3ii. to Oiss. of hot water, cooled down to just below 100° F.) into the loose abdominal tissue near the ribs. In a very short space of time there was a marked improvement, not only in the convulsions, but also as regards the *collapse*. Pleased with the result, and noticing that still the convulsions were likely to get again worse, another 3viii. or 3x. of the solution was injected into the tissue of the abdomen on the opposite side half an hour afterwards. Both these injections caused the patient a good deal of pain around the adjacent points where the trochar entered, at the time and for *two days afterwards*. The most noticeable effects were the immediate increase of the pulse beats and its volume, also that large quantities of urine were passed in

the first twenty-four hours. Some fourteen hours after labour, one or two slight convulsions with excessive facial twitchings were again present. A mixture of pot. brom. grs. xv., mag. sulph. grs. xxx., and tr. digit. ℥x. in ʒi. aq. menth. pip. was ordered three times a day, and an (Hg. Cl₂) antiseptic vaginal douche to be used twice a day. Patient went on satisfactorily until the sixth day, when she had three or four fits, and when seen temperature 100°, headache, increased lactation, pulse 70 and feeble, constipation, lochia very scant, pale but no offensive smell; anasarca present in both ankles and feet, retention of urine (*a little was procured and tested, and a large quantity of albumen was present*). A purge was at once given of grs. iv. calomel with grs. xl. pulv. jalapæ co. and Oiss. of hot water with ʒii. Na. Cl. was injected into rectum with an ordinary india-rubber syringe, which was nearly all retained, and the usual ordinary treatment in such cases carried out. The after-history.—Patient made a good recovery, and on August 25th, when urine was tested, albumen certainly was present, but in a very small quantity; the urine in quantity is normal, and there is no anasarca of limbs. Patient is still taking the pot. brom. mixture.

Several English authorities and others have spoken highly of normal saline solutions as injections for collapse and also for the convulsions in eclampsia, but this is the first time I have attempted to act on their suggestion, and I am of Dr. A. E. Wigg's (of Adelaide) opinion that the use of common salt for hypodermic injections is a safe and invaluable remedy in many instances in the practice of gynecology and obstetrics, and the apparatus, etc., ought always to form a useful and needful adjunct to our obstetric bag.

FURTHER NOTES ON A CASE OF PULSATING EXOPHTHALMOS.

BY ARTHUR E. MILLS, M.B., HON. ASSISTANT PHYSICIAN, PRINCE ALFRED HOSPITAL, SYDNEY.

THE specimen which I show you to-night, is the intracranial portion of the internal carotid artery and the cavernous sinus. It was taken from the patient whom I exhibited before this branch a few weeks ago, as a case of pulsating exophthalmos. (See page 289, July.) The diagnosis then was varicose aneurism of internal carotid artery and cavernous sinus, and it was proposed that the internal carotid should be tied. The patient was transferred to the care of Mr. Hinder who tied the

common carotid artery, because the internal carotid was considerably dilated from its origin upwards.

The bruit which was so audible over the cranium before operation, almost disappeared after the operation for some days. Gradually it returned however, but it was not so loud as before. The exophthalmos likewise diminished to a large extent, but not wholly. The movements of the eyeball were much more free, and the paralysis of the external rectus disappeared.

The patient remained in much the same condition for some three weeks after the operation; the wound had healed perfectly without any trouble. Suddenly, however, she complained of having a pain about her epigastrium. The nurse went to get a foment to relieve her, but hearing the patient utter a peculiar noise, she returned and found the patient in a faint. From this faint she never recovered. Artificial respiration was persisted in without avail. The patient never regained consciousness. Permission to examine the interior of the skull only was granted.

On removal of the brain, the cavernous sinus of the right side was more bulging than on the left. The sinus with the internal carotid artery was removed. On opening the sinus, there was found an opening in the internal carotid, about the size of a pepper corn, communicating with the sinus.

The artery at the site of the opening was dilated. Beyond some thickening of the *pia mater* over the cortex of the frontal region, there were no other signs of disease discoverable. The arteries were apparently healthy, there was no obstruction, nor aneurismal dilatation of any of them. The brain itself appeared to be perfectly healthy.

I do not think now that ligature of the carotid could be of much benefit in this case; the opening in the vessel was too large. The collateral circulation would soon allow of a stream sufficient to keep up the former evil conditions, though perhaps to a slighter extent. Nor do I see that any other proceeding would be attended with success.

The only sources of consolation as regards this case are that the operation in no way hastened her end, and that the diagnosis was quite verified. The cause of death was undoubtedly syncope, but why the heart suddenly stopped is not clear, as during life, no cardiac lesion was discoverable.

WANTED TO PURCHASE, a good second-hand MICROSCOPE for Bacteriological purposes, complete, with Immersion Lens and Abbé Condenser; also, MICROTOME. Send full particulars and price to Dr. R. E. S., care of L. Bruck, Sydney.

THE TALLERMAN TREATMENT BY SUPER-HEATED AIR, WITH NOTES OFTEN CASES UNDER TREATMENT AT MR. O'HARA'S PRIVATE HOSPITAL, MELBOURNE.

By T. R. H. WILLIS, M.B., B.S., MALVERN, VICTORIA.

(Continued from August number, page 331).

CASE IV.—B., æt. 60.

ARTHRITIS DEFORMANS (?) OF CARPO-METACARPAL JOINTS OF THUMBS.

Second bath, May 26, 1899. Limb treated, right arm.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98.4	—	74	...	16
After 15 min.	98.6	180	84	one hour	18
" 30 "	99	220	84	...	20
" 45 "	99	240	88	...	20
" 60 "	99.2	252	92	...	20

Fifth bath, May 31, 1899. Limb treated, left arm.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98.4	—	80	...	16
After 15 min.	98.4	190	96	one hour	18
" 30 "	98.8	215	100	...	18
" 45 "	99.2	240	104	...	18
" 60 "	99.4	255	104	...	20

May 25th.—Patient, who is a nurse, states that she hurt both her thumbs last December (1898). She was fixing some curtains in a window, and in getting down she stepped on a stool which slipped, and she fell on both her thumbs with her hands behind her. The thumbs have been painful ever since, and are getting worse, especially when used. She had had occasional rheumatic pains previously. No history of rheumatism nor gout in the parents. One aunt had rheumatism, and another suffered from gout in the thumb; several cousins suffered severely from rheumatism. Patient left England for this colony about fourteen years since because of "lung mischief;" she had then constant cough and expectoration; her health has been much better ever since she came out here. She had had no treatment for her thumbs. There is distinct grating in the carpo-metacarpal joint of either thumb on passive movement; any active movement causes pain. The right arm was put in the cylinder for half-an-hour, then passive motion of both thumbs.

May 26th.—States that she wrote some letters this morning with much more ease than she had previously written since the accident. Has had slight rheumatic pains in the right shoulder. After the bath to-day she could move the right thumb much more easily; she could also fully extend it without pain, which she had been unable to do before.

May 27th.—Has been sewing to-day, and, though awkward, it was painless; a few ad-

hesions broken down to-day after the bath without pain.

May 29th.—Can sew and write fairly well, but has pain on moving thumbs in some directions; after passive motion to-day could move both thumbs freely; the grating during passive motion has appreciably decreased, and can scarcely be detected at all in the left thumb; the swelling about the joints has also diminished.

June 6th.—Patient has to leave Melbourne; she has been laid up for a few days with a catarrhal attack. I would have liked her to have two or three more hot-air baths, but she cannot delay. She writes: "My hands are infinitely more serviceable than before using the hot-air baths, and there is no grating in the thumb that was so bad."

Case V.—B., æt. 42.

SCIATICA.

First bath, May 29, 1899. Limb treated, left leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98.4	—	72	...	16
After 15 min.	98.4	185	72	one hour	16
" 30 "	98.8	210	84	...	18
" 45 "	99	230	88	...	18
" 60 "	99	240	88	...	18

Third bath, May 31, 1899. Limb treated, right leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	99	—	80	...	16
After 15 min.	99.2	190	84	one hour	16
" 30 "	99.4	215	84	...	18
" 45 "	99.4	230	84	...	18
" 60 "	99.4	240	88	...	20

May 29th, 1899.—Patient, who is a Civil servant, has no family history of rheumatism or gout in either parent. Has had no other illness for twenty-eight or twenty-nine years, at that time he had what he calls "a sharp liver attack," which laid him up for some time. He then went field-surveying for a few months, and quite recovered. Is practically a teetotaler; smokes a little. He first had a slight attack of sciatica two or three years ago; this lasted about a fortnight, and got well under treatment by hot hip-baths. He had no further attack until about six months since, but from that time he has been almost constantly in pain. The sciatica began in the right leg, and has never quite left that limb; pain in the left leg, felt most severely in the calf, first noticed about a week ago. All through he has been able to flex and extend both legs, but on rising in the mornings, or after resting for a time, he is unable to flex the left leg now without pain. Has had no other form of rheumatism. He has had no medicinal treatment internally; locally he had five hot medicated baths without any benefit. Later

on he was rubbed on the spine and right leg with acetic acid, which scarred him pretty severely, but gave him relief for the time being. After the first bath to-day patient stated that he was quite free from pain.

May 30th.—Has had no pain since yesterday, except just after rising this morning; it ceased on movement, and left him able to sit down with comfort to his breakfast; for some time past he has had to take this meal standing. Says he feels a sort of quivering in the muscles where he used to feel pain.

May 31st.—Again had pain in the left leg before getting up this morning, which soon disappeared on getting about; no pain before nor since; slept quietly all night.

June 2nd.—Had his fourth and last bath; feels a little stiffness in both lower limbs, but no pain; considered himself well enough to discontinue the treatment.

June 25th.—Have heard again from patient; he is quite well, and has suffered no pain since.

Case VI.—Dr. H., *et.* 50.

GOUT.

First bath, June 3, 1899. Limb treated, left leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98	—	80	...	16
After 15 min.	98.6	190	92	one hour	16
" 30 "	99.4	220	104	...	16
" 45 "	99.4	235	112	...	16
" 60 "	99.4	245	112	...	16

Eighth bath, June 20, 1899. Limb treated, left leg.

Before bath	98	—	80	...	12
After 15 min.	98.4	220	80	one hour	12
" 30 "	99.2	240	88	...	12
" 45 "	99.2	245	92	...	16
" 60 "	99.2	250	100	...	16
15 minutes after bath	98.4	—	76	...	14

Patient, who is a medical practitioner, stated that he has always been a free liver so far as food is concerned; he never drank nor smoked much; always took claret at one or two meals a day, and attributed his gout to this, although he did not take much of it at a time. Has not had syphilis. No family history of gout or rheumatism. Patient had his first attack of gout over nine years ago, shortly after coming from England; he describes it as "virtually a neuritis of the brachial plexus;" it caused him most acute pain, confined him to the house for three or four months, and was only relieved by morphia hypodermically. This attack left as sequelæ a tendency to headaches on the right side, and a numbness of the palmar surface of the right thumb, which has persisted ever since. For the last two years he has suffered from intensely cold feet, and when he walks is often pulled up suddenly by acute pain in the

left great toe. He had occasional pain in the left heel and at the back of the left tendon Achilles, and at odd times in the left knee. Had acute pain and swelling in the left knee two years ago, which lasted only a few days. Had "some mitral trouble" about eighteen years ago (there is none discernible now); shortly after that he developed some loss of co-ordination, and for a time could not walk straight. Had malarial fever many years ago. Gets an occasional sore throat; never had any bronchitis; never had albuminuria. When a student he had eczema of both arms, which was at the time considered to be a sequela of scarlet fever. There is a definite family history of tubercle on the mother's side. Patient has latterly exercised every possible care with respect to his diet; sleeps well. He has had no bath treatment of any description, but has taken salicylates, iodides, colchicum, lythia, antipyrin, phenacetin, &c. When first seen by me patient was walking very lame, and complaining of constant pain in the left heel; he had thick pads of cotton wool in the stocking and boot. The heel was swelled, the skin shiny, red, and puffy, and he could not bear any handling of it. There was a well-marked corona on the left great toe at the metatarsophalangeal articulation. There was distinct thickening over the right mastoid process at the insertion of the sterno-mastoid. After the first bath he was able to walk better, and the heel was rubbed briskly with a towel without much pain.

June 4th.—Patient felt considerable ease for about an hour after his first bath; after two or three hours, when the feet got cold, the pain returned as badly as usual. He had a slightly sore throat this morning, which cleared upon taking 15 grs. of sodium salicylate.

June 5th.—Feels no difference in his condition; has pain in the left heel, left great toe, and slightly in the right foot; also has pain in the right elbow, back of neck, and headache on the right side (he has never had it on the left side); complains of "a buzzing sensation in the right ear, synchronous with the pulse." In his own words he "seems to have a general tendency to ache to-day." He attributes his condition, and is probably correct, to a possible dissipation of uric acid salts from the left leg, caused by the intense local heat.

June 10th.—Has had five baths; is much better, but complains of pain in both legs when he goes to bed at night, and a dead feeling in the lower limbs when he first gets out of bed in the morning. Has no cotton wool

about the heel now, and is able to pull on and wear a new boot.

June 18th.—Patient says he is "splendid"; has no pain and walks well.

June 23rd.—Has had nine baths. Is apparently quite well; walks without any limp or pain; permits free handling of the heel; is riding his bicycle.

July 2nd.—Patient remains perfectly well; pain and numbness have completely disappeared. While under my care he was taking piperazine and lithia.

Case VII.—M., *æt.* 42.

ARTHRITIS DEFORMANS.

First bath, June 6, 1899. Limb treated, left leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98.4	—	96	...	16
After 15 min.	98.4	190	108	one hour	20
" 30 "	99	210	108	...	20
" 45 "	99.2	230	116	...	20
" 60 "	100	240	116	...	20

Fourth bath, June 16, 1899. Limb treated, right leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98.6	—	84	...	16
After 15 min.	98.8	215	84	one hour	16
" 30 "	99.4	230	96	...	16
" 45 "	99.2	230	96	...	16
" 60 "	99.4	240	96	...	16
15 minutes after bath	98.4	—	88	...	16

Ninth bath, June 29, 1899. Limb treated, left leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	99.4	—	84	one hour	16
After 30 min.	100.2	250	96	...	16
" 60 "	100.6	265	104	...	16

June 6th.—Patient, who is a stock and share broker, first had an attack of rheumatism when he was fifteen years of age; he was then laid up for three or four weeks, and had his muscles and joints generally affected. After that he had slight attacks off and on for years, being laid up at intervals for two or three days. His next severe attack was a little over twelve months since, when he was confined to bed for about six weeks. From that time he has never been quite free from pain. He had a sharp attack last Christmas, which laid him up for several days. The pain as a rule commences in the loins, then travels to the groins, and spreads down both legs. Every joint and muscle seem to have been affected at one time or another. Says he has never been a heavy smoker nor drinker, but it is probable that he has taken alcohol much too freely. Is very careful of his diet. Sleep is restless and broken, and he is apt to get muscular cramp when he turns in bed. Has been losing flesh latterly. Father has had attacks of lumbago; mother suffered from arthritis deformans of late years, and died about twelve months ago from diabetes. One brother died from heart disease, and had had acute rheumatism. Patient has

had all sorts of medicinal treatment, but has never persisted in any bath treatment, though he has had vapour baths and hot water baths at times. He now has enlargement of the metacarpo-phalangeal joints in both hands; feet similarly affected in a slighter degree. No marked enlargement of any other joints, but says any or all of them get into a puffy condition during an acute attack. Cannot completely flex the right thigh nor the right hand. Has a quick, irritable heart; no bruit. After the first bath he expressed himself as feeling "much more lissome" than before he went into the bath; could completely flex the right thigh without inconvenience. Was ordered pot. acet. and pot. bicarb. Patient was treated with hot air on June 6th and 7th. On the evening of June 7th pain set in acutely in several joints; he was unable to flex the right leg at all, was confined to his bed for three entire days, and could not get into town again until June 14th. He was then much easier, and all pain was relieved after the application of hot air.

June 29th.—Had his ninth hot-air bath to-day; there is a little swelling of the right hand; he is keeping free from pain, and sleeping well. From June 14th until to-day he has been steadily improving, and losing the tenderness in the hands and feet, and the stiffness in the lower limbs. Has taken no medicine of any kind for about a fortnight. Patient is still under treatment.

Case VIII.—R., *æt.* 29.

ARTHRITIS OF KNEE (LEFT.)

First bath, June 7, 1899. Limb treated, left leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98.8	—	80	...	20
After 15 min.	99	200	96	one hour	20
" 30 "	99	215	96	...	20
" 45 "	99	225	96	...	20
" 60 "	99.4	235	108	...	20

Fifth bath, June 16, 1899. Limb treated, left leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98.6	—	76	...	20
After 15 min.	98.6	200	84	one hour	20
" 30 "	99	215	100	...	20
" 45 "	99.2	225	104	...	20
" 60 "	99.4	235	120	...	20
15 minutes after bath	98.4	—	92	...	20

June 7th, 1899.—Patient states that about thirteen weeks since he struck his left knee against a garden-roller while playing tennis; the point of impact was about one inch above the patella on the extensor tendon; he went on playing tennis for half an hour, when he broke down and had to be taken home in a cab. A few hours afterwards the joint commenced to swell. After about two weeks' treatment with local remedies, liniments, blisters, etc., he got

rid of the pain and most of the swelling (which was never very great), and from that time there has been scarcely any improvement. For eleven weeks he did not use the limb at all; then he started hobbling with the aid of two sticks, but the limb was almost powerless. No tubercular history. Never had syphilis. No history of rheumatism or gout, except in one brother, who had rheumatic fever, and died eventually from dropsy. General health good; never had any joint injured before.

All ordinary treatment having failed, Dr. Clayton, of Auburn, brought him to me to try the effects of hot air. On examination there was found to be no difference in the circumference of the knees (14 in.); yet there was some thickening and effusion below the left patella, and patellar movement was very limited. There was no displacement of the cartilages. He could not flex the knee beyond a right angle, and could not bear passive motion beyond that. After the first bath, on June 7th, the leg was forcibly flexed well beyond a right angle, with very little pain; a few adhesions could be heard giving way. He was then able, for the first time for thirteen weeks, to walk about the room without his sticks, and in half an hour, with the assistance of the sticks, walked 300 or 400 yards to the railway station without pain.

June 12th.—Patient can voluntarily bend the knee well; walks without pain, and can stand steadily on the injured leg alone without any support.

June 16th.—Had his fifth and last bath to-day. Can flex and extend the limb without inconvenience.

June 23rd.—Improvement continues; walks with a very slight limp; no pain since last entry.

Case IX.—M., *æ*t., 57.

ARTHRITIS DEFORMANS.

First bath, June 8, 1899. Limb treated, right arm.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98.4	—	90	...	22
After 15 min.	99.4	210	96	one hour	24
" 30 "	99.4	240	100	...	24
" 45 "	99.4	250	108	...	24
" 60 "	99.4	265	108	...	28

Second bath, June 12, 1899. Limb treated, left arm.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98	—	88	...	20
After 15 min.	98.4	190	100	one hour	20
" 30 "	98.6	230	104	...	20
" 45 "	99.6	240	104	...	24
" 60 "	99	250	108	...	24

June 8th, 1899.—Patient, who is a sister of mercy, states that she has never been strong; in her younger days she suffered greatly from dysmenorrhœa. Six years ago had severe

bronchitis, followed by prolapsus ani, and then phlebitis in both legs. Swelling in the hands commenced in 1898, and has become much worse during the last six months. She became unable to close the right hand, and any pressure, such as shaking hands, gave her a good deal of pain. No rheumatic nor gouty history; one aunt died from aneurism; father had "a weak heart," and died from "rupture of a blood-vessel." Is a heavy tea-drinker. Patient now has swelling of the metacarpophalangeal joints, most marked in the middle and fore fingers, and in the right hand. Both ankles are thickened, and there is effusion around the joints. No distinct grating on moving the patellæ, but a hard clear sound is emitted as if there were some destruction of the synovial membrane. Distinct grating in the knee-joint on moving either leg from the ankle or the thigh. Both knees are enlarged, but there is very little effused fluid about them. Heart's action regular but fast; no bruit.

After the second bath the swelling of the hands was distinctly less; while the arm was in the cylinder patient could move the fingers freely and painlessly, and could afterwards completely flex both hands.

Patient expresses herself as feeling much relieved; she has to go to Sydney on June 14th, and will be unable to return for further treatment until next August.

Case X.—Margaret F., *æ*t. 61.

ARTHRITIS DEFORMANS.

First bath, June 9, 1899. Limb treated, left leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	98.6	—	72	...	18
After 15 min.	98.6	210	72	one hour	20
" 30 "	99	225	80	...	20
" 45 "	99.2	240	84	...	20
" 60 "	99.8	255	88	...	20

Fifth bath, June 18, 1899. Limb treated, left leg.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	99.2	—	68	...	16
After 15 min.	99.2	220	72	one hour	20
" 30 "	99.4	240	76	...	20
" 45 "	99.6	240	84	...	24
" 60 "	100	255	88	...	24

Eleventh bath, July 1, 1899. Limb treated, right arm.

	Degrees of Temperature.	Degrees of Heat.	Pulse.	Duration of Bath.	Respirations.
Before bath	99	—	72	...	16
After 30 min.	100	250	84	one hour	20
" 60 "	100.8	280	96	...	24

Patient states that until 1893 she had always been a healthy woman. One day in 1893, after swimming for a long time, she first felt sharp pains in the right shoulder; this was attributed at the time to a strain, and the arm was kept in a sling for three months; on giving up the sling there was found to be considerable loss of movement in the right shoulder-joint. Shortly afterwards the knees began to pain and swell; from that time the disease has spread

slowly until almost every joint in the body, including the back of the neck, has been affected. One of the first joints involved was the left wrist, which had been injured previously. From the time that the knees began to trouble her she has never been a single day without pain. She suffers from constipation; also from "scalding in passing water"; formerly she passed lithates very freely, but has not done so of late. For the last few months she has been much worse, the pain becoming more severe, and she has rapidly become more helpless; it is only with the greatest difficulty that she can get from one room to another, leaning on her crutches. Has not been a heavy tea-drinker, and is a teetotaller. Has had ten children, but never any uterine trouble. Gets occasional palpitation. Father died from rheumatic fever; mother, a healthy woman, died lately, aged 80; one paternal cousin is now completely crippled by rheumatism. Has had all sorts of medicines and quackeries; was five weeks in a hydropathic establishment; has had a course of electric baths; underwent massage treatment for a period of five months four years ago; this caused some improvement, but nothing else had any effect.

When the patient came to me for treatment she was hobbling on crutches; both hands were swelled and mis-shapen, especially the left. The left wrist, right elbow, both feet and ankles, were swollen and puffy. The left leg was abducted on the thigh; both knees were much enlarged, with distinct grating on movement; the left knee, the most painful of all the joints, could not be straightened. She could hardly put any weight on her legs; could not sew, nor use her hands much; could not get the right hand within six inches of her mouth, has not done her own hair for years. Has a weak, compressible pulse; heart sounds weak and irregular; no bruit.

July 1st.—The further history of this case is one of slow, steady improvement; she has now had eleven hot-air applications; the swelling in both knees has much decreased, and the left knee has become more shapely. The left leg, which was the worst, is the limb usually put in the cylinder, and it is now much stronger and more reliable than the right. She has walked over 200 yards on her crutches, the furthest distance she has accomplished for months; taking another person's arm she is able to walk about a room without crutches, and with very little pain. She is able to sew and to deal cards with only a little inconvenience. She can now get her right hand to her mouth. For the first time she was able

to-day to take a few steps across a room without any support. Passive motion of all the joints has been practised after each bath; though this has caused pain temporarily she is much freer from pain than before she was treated with hot-air. The only medicines ordered her have been occasional doses of mag. sulph., with podophyllin, and during the last week sod. salicylas and potass. acetat.

She is still under treatment, and a further report of the ultimate result will be furnished later on.

REFORM IN QUARANTINE.

By W. L'ESTRANGE EAMES, M.B., CH.B. DUB.,
NEWCASTLE, N.S.W.

READ BEFORE THE NEW SOUTH WALES BRANCH
OF THE BRITISH MEDICAL ASSOCIATION, SEP-
TEMBER 1ST, 1899.

FEDERATION is now all but an accomplished fact, and quarantine is one of the services which the Federal Parliament will at once take over. It behoves us, therefore, to consider the subject very carefully, in consequence of its bearing on commerce.

Prior to the year 1892 quarantine was practised only on infected vessels, that is with infectious sickness on board, but since that time we have been making our quarantine regulations more stringent, whilst the necessity for doing so, in consequence of the improvements in our internal sanitation and water supplies is daily becoming less. Every vessel from an infected port is now not only strictly quarantined until the crew have been examined, but whether there is sickness or not, she is fumigated, and forced to pump out every drop of her drinking water, and until she has emptied every drop of water from her tanks no one is allowed to leave the ship.

But the matter does not end here. If sand or soil ballast is carried, this has to be lightered to sea which in my opinion, and that of the Newcastle medical profession is an unnecessary measure. Prior to the year 1892, as soon as a port was proclaimed free from sickness the name was taken off the proclaimed list; but now once a name goes on that list there is no hope of getting it off again, and when I tell you that pretty well the whole of the East is on the list you can well understand what an effect a quarantine of this kind, which is increasing in stringency, is bound to have on our commerce, and how it affects trade with the East. I will read you an extract from a letter from Mr. Earp, President of the Newcastle Chamber of Commerce, which says:—

I can positively state that the various restrictions which have been placed upon shipping, together with other various drawbacks have impaired the reputation of the port and diverted tonnage, which would have come to Newcastle, to other destinations for loading.

Quarantine is instituted as a measure principally for preventing the introduction of plague, cholera, yellow fever and smallpox. Now, in order to study its effects, I will read you the Editorial of the *British Medical Journal* of September 12th, 1891, which says:—

Those that cling most tenaciously are the most neglected countries from a sanitary point of view, those in which sanitary progress was almost unknown and those which suffered most from cholera. Nations which subject themselves to the disabilities and drawbacks of quarantine, are not inclined at the same time to spend money on sanitary measures. The fact, indeed, of being promised protection against disease by means of quarantine seemed a reasonable objection to incurring expense on works of sanitation, and the more ignorant the population the more they preferred the risks and drawbacks of quarantine to the certainty of having to pay for improved water supply, drainage, removal of town refuse, and so on.

Now, one would think that Australia, with her sparse population, her Boards of Health, State Education, her waterworks and Public Health Acts was not referred to in this article, but I can assure you it is in the following terms:—

The experience of Australia in relation to smallpox. So long as the inhabitants are taught that on suspicion whole shiploads of people, healthy or not, will, irrespective of consequences to them, be detained in quarantine, with a view of protecting the colonists against smallpox, why should these latter subject themselves to the inconvenience, trivial as it is, of vaccination. Sanitary administration in relation to cholera and other diseases stands in precisely the same position to cholera and other diseases as vaccination does to smallpox, and quarantine measures applied to one or other disease constitute a distinct hindrance to the adoption of the only true measures of prevention. How true this is, every medical man in the country can testify—and what a broken reed to trust to.

Here in N.S.W., hardly one person in ten is vaccinated; and as for the effect on trade, there is hardly a ship in Newcastle, which at this time of the year is unprecedented. For a few moments I am going to deal with the regulation insisting on earth or sand being sent to sea, and its relation to smallpox, fever, plague and malaria.

About smallpox the soil has never been questioned.

Yellow fever.—Until Sanarelli described the micro-organism which caused yellow fever in 1897, this disease was looked upon by many as essentially a soil or mud contained poison, but his experiments go to prove that the essential factor for the development of colonies of icteroid microbes is the presence of mould.

Sanarelli, in the *British Medical Journal*, July 3rd, 1897, says:—

"The common moulds of the atmosphere are the great protectors of the bacillus icteroides. It is indeed highly probable that, especially in the holds of badly ventilated vessels and constant heat and humidity, considered in their physico-chemical effects, are the conditions which maintain so long in life the microbes of yellow fever accidentally arrived there. We must then consider moulds as the natural protectors of the specific agent of yellow fever because it is solely through their intervention that the latter can find the force to live and multiply, whereas the unsuitableness of the nutritive means or the unfavourable action of the developing temperature would render its existence altogether impossible. It is, then, probable that the factor of humidity, whether on board ships, on the coasts, or the interior of countries, represents the principal co-efficient of a biological phenomenon rather than that common meteorological influence, the action of which is always identical in the etiology of almost all epidemic diseases. On the other hand, the notable resistance presented by the bacillus icteroides towards the principal factor of natural disinfection, that is to say drying, and its great longevity in sea water sufficiently explain the ready acclimatisation of icteroid typhus and its obstinate persistence, especially in the maritime localities afflicted by the immigration of its specific agent."

Plague.—Kitasato and Yersin have demonstrated that the specific cause of plague is a coccobacillus, which occurs in great profusion in the characteristic buboes, and also in the spleen, intestine, lung, kidney, and liver, etc. The most potent circumstances which predispose to the epidemic outbreak of plague are, extreme filth and overcrowding, an atmosphere saturated with the evacuations of the sick, a lowered tone of general health, abundant saturation of the surrounding soil and media with animal refuse fitting them as a medium for what might be termed natural culture of the germ, abundance of body vermin of all kinds, abundance of other vermin such as cats and mice which serve as multiples of the virus, carelessness about personal cleanliness, about wounds of the hands and feet, about clothing, about food dishes and water. Plague bacilli have been detected in the dust and earth from the floors of plague-stricken houses.

Cholera.—It is now generally accepted that the particulate contagium of cholera is the specific micro-organism, the comma bacillus. Whether it is by this particular organism alone, or whether it is only when in conjunction with some other as yet unknown microbe, that the symptoms of cholera are generated, the general belief prevails that cholera is mainly spread by means of the drinking water, though dissemination may occur in other ways, more particularly from an "excrement sodden earth" which fouls not only water but air. Koch, who discovered the comma bacillus, made the

very interesting observation that the comma bacilli die very rapidly when dried. Hence it is inferred that no living comma bacillus can exist in dust, and that the transport of living comma bacillus through the air is impossible ("Poore," p. 113).

Dempster's experiments indicate that in dry soils, evaporation not prevented, comma bacilli were alive on the third but dead on the fourth day. Now the average length of voyage to New South Wales is sixty days, never less than twenty-seven days, and anyone watching the discharge of ballast will be struck by its dry nature. So that, even if comma bacilli were placed in the ballast, they would be perfectly harmless by the time they arrived here.

Malaria.—I need only refer you to Patrick Manson's book on Tropical Diseases, and an article which appeared in the *British Medical Journal*, July 1st, 1899, by Major Ronald Ross, for all information, which seems to definitely prove that the cause of malaria does not exist in the soil, but is due to a certain parasite developed in a mosquito, and injected into man; furthermore, that it is not every kind of mosquito that is capable of becoming malaria-bearing; since the introduction of malaria seems to depend on a certain kind of mosquito, which does not exist here. It therefore appears there is no occasion to any longer shut out these soils coming from malarious countries, but to rather turn our attention to the life history of the mosquito, and prevent the conditions arising here which would prove favourable to its development.

Now a visit to Carrington, a municipality adjoining Newcastle, will convince even the most sceptical that the work in progress there is calculated to lessen the opportunities for the development of the mosquito, by filling up marshy ground which at the present time simply hums with our native variety; and the natural inference is to fill up all pools and puddles as quickly as possible which might become breeding grounds for the malarial variety, should it be accidentally introduced.

Having considered the various diseases which have been looked on to a certain extent as soil diseases, from the latest available data, I think we are justified in considering that to become harmful in the soil, even if the germs are placed in the soil, certain conditions are necessary. Do these conditions apply to earth or soil ballast as brought to Newcastle? This is in almost every instance taken from the side of a hill or from the sea-shore, but wherever it comes from, it has to be shovelled into a basket or

truck, which thoroughly aerates it; then taken to the ship and emptied into the hold, which aerates it again. The hold of the vessel is lined with boards, beneath which are the bilges. If there is any moisture remaining in the ballast, this will be drained into the bilges and be pumped out. Vessels coming to Newcastle average some 60 days.

Now if there were anything deleterious in the ballast, surely it would show some evidence on the crew who worked it into the ship; inhale its exhalations; frequently swallow some of the dirt in their food, which anyone who knows anything of a fore-castle will readily admit; sleep with it in their working clothes, hung right along side of them; soil their wounds, such being of common occurrence in their employment; and live over it for an average of 60 days, in all weathers hot and cold, fine and wet. Surely if there is anything to be feared from such soil, it is bound to show itself, and I think we may safely conclude that in the event of a vessel arriving free from sickness, there can be no possible danger in discharging it ashore. Again even if infected earth were implanted, unless conditions favourable for the germination of the special micro-organisms implanted exist, no danger will result. Now, if anyone visiting Carrington, and observing the discharge of ballast, must say that far from such conditions being produced or existing, a great national work is being done, which will benefit the State by millions of pounds, and at the same time convert what might be a possible danger into very desirable land. There is another point, the treatment which the ballast receives in being worked into the ship is the very best possible for the disinfecting and purifying of infected earth, especially when the modern ship is in question, dry, well ventilated, and with no danger of excreta draining into the holds, as was frequently the case in the older type of vessel.

So much for the ballast. With regard to the pumping out of water, whatever reasons there may be for the vessels with sickness on board doing so, none exist when they have a clean record, and in any case to keep the ship and all on board in strict quarantine while the water is being pumped out is surely a very arbitrary and unnecessary measure.

Quarantine for Smallpox.—The futility of quarantine for smallpox in the days of fast steaming has been so frequently pointed out that there is no occasion to more than refer to it here. Why not take a leaf out of Germany's book? Last year, 1897, five deaths occurred in the German Empire from smallpox in a

population of 53,000,000, and this is due to the simple but efficacious precaution of compulsory vaccination and re-vaccination.

The adoption of this measure will only be brought about when it is made perfectly clear to the people that quarantine is not to be relied upon as a protection against smallpox. Dr. Thomas Borthwick, M.D. Edin., M.O.H. for Kensington and Norwood, read an excellent paper in 1897 before the South Australian Branch of the British Medical Association on this subject, and the conclusions he arrived at were:—

1. That the quarantine system is defective in many respects.
2. That leakage is liable to occur under the system from sources which are unavoidable.
3. That leakage has actually occurred.
4. That the reason why disease has not obtained a stronger hold inland has been owing to the application of harsh methods of local quarantine and the expenditure of large sums of money.
5. That all this procedure does not guarantee complete protection.
6. That the imposition of effective quarantine would dislocate commerce to such an extent and cause such general discontent as to render it absolutely impracticable.

Dr. Collingridge, medical officer of the port of London, in his Milroy lectures, says:—

1. The quarantine system is based upon a theory that is no longer tenable.
2. That it has never been found possible to maintain it absolutely, and that consequently a country has been subjected to a barbarous, unnecessary and costly system without the satisfaction of knowing that the experiment was complete.
3. That, where carried out as strictly as possible, it has not had the effect of arresting the importation of disease.
4. That sanitation and a rational system of medical inspection have proved more efficacious and at the same time less burdensome.

The whole history of quarantine is a series of illustrations of its futility, and proves it to be, as Sir John Simon so graphically described it "an elaborate system of leakiness."

An effective quarantine is practically impossible in a commercial country.

Dr. Browning after extended travel and experience of quarantine says that:—

The pecuniary loss inflicted by the system may be estimated by millions of pounds sterling in delays, demurrage, loss of freights, interest, deterioration of merchandise, increased expenses, fluctuations of markets, and other calculable elements; but the sacrifice of happiness, the weariness, the wasted time, the annoyance, the sufferings inflicted by quarantine legislation, these admit of no calculation, they exceed all measure.

There is no occasion to say more, let us profit by the experience of other nations, it is cheaper than paying for it ourselves, which we shall most

assuredly do, and the price in our unvaccinated community will be a terrible one.

We are shortly to become a nation, let us show that we fully appreciate that advantage. From our close proximity to the east, a magnificent field of commerce is offered to us. We have exceptional natural advantages; but if at the commencement of our nationhood we place the disabilities of quarantine in the way of our commerce, the markets which are at our doors will be exploited by other nations. It only remains for us to perfect our sanitary measures, waterworks and disposal of town refuse, and adopt compulsory vaccination; then abolish quarantine, and substitute medical inspection, with the application of the Public Health Act. Then, free from all the disabilities which quarantine imposes, we shall stand before the world as an example of an enlightened nation, and ready without restrictions to enter into commercial undertakings, confident in the strength and perfection of our sanitary systems, pure water, and the disposal of town refuse, of being able to do so without risk, the proud offspring of a grand old mother.

Mr. President and Gentlemen, I have to thank you for the very patient hearing you have given me to-night. I can assure you that it was only under compulsion I brought this matter up, being cognisant of the immense amount of harm that was being done to our commerce. The public look to us for guidance in these matters, then why should we recommend the perpetuation of a system, knowing it to be ineffectual?

(For discussion on this paper see page 408.)

TWO CASES OF WEIL'S DISEASE.

BY JOHN S. PURDY, M.B., C.M. ABERD.,
HUTT, NEW ZEALAND.

THE two following cases of jaundice occurring successively in two daughters of one family, the onset being marked by febricular symptoms, enlargement of liver and spleen, combined with nephritis, may be of interest as evidence of the infective nature of the disease.

The character of the attack and course were identical with the cases recorded by Weil. The district where they occurred, Pauhautainui, N.Z., being high and salubrious with a temperate climate, removes any suspicion of malaria in these cases.

The sanitary arrangements of the house were those of the average colonial farmstead, with earth closets, and the usual manure heap within smelling distance. The water supply from an Artesian well was as perfect as could be desired.

As a visit necessitated a drive of fourteen miles through rough country I was only able to see them twice a week.

CASE I.—May 16th, 1899. I was called to see Miss A.M., aged 17. Complained of headache, pains in back and limbs, no appetite, bowels constipated. Was told that four days previously she had rigors, was extremely thirsty; skin hot and dry. The third night, had been delirious. When seen, had well marked jaundice of skin and conjunctivæ. Temperature 102°, pulse 94; swelling and tenderness over liver, spleen enlarged, urine diminished in quantity, contained bile pigments, epithelial and blood casts, and was albuminous.

Purge of pil. colocynth et hyoscyami followed by mag. et sod. sulph.; pipeclay stools. Continued $\frac{1}{2}$ gr. doses of calomel every four hours, together with salol in 5 gr. doses.

May 19th.—Temperature in morning 101°, less lassitude and malaise, tongue cleaner, jaundice less marked.

May 23rd.—Jaundice disappeared, stools natural colour, still trace of albumen in urine.

May 26th.—Temperature normal, appetite returned, palpation of liver and spleen no longer caused pain.

June 2nd.—Patient convalescent, urine free from albumen.

CASE II.—June 16th. Called to see Miss M. M., 2 years older than her sister (the former patient.) History of rigors, pains in head, back and limbs, furred tongue, constipation alternating with diarrhoea. Sudden onset on June 11th as in former case, jaundice with well marked tenderness, enlargement of liver and spleen, urine bile stained with only a trace of albumen, temperature 102°.

This case had a similar course to that of the sister, the temperature becoming normal by lysis on the eleventh day, the jaundice gradually disappearing.

I may add that in neither of these cases was there any rash, erythema or hepatic eruption. Both the girls had enjoyed good health up to the time of the respective attacks, and at the time of writing, August 3rd, are quite well.

From observation of these cases I should think the condition due to some pathogenic organism, and that the contagious nature of the cases could be explained on no other hypothesis.

MICROSCOPES, compensation, one Richert stand with Zeiss lens, getting all the advantages of a perfect microscope at a third of the usual cost. S. Mills, 168 Pyrmont Bridge Road, Glebe (of Medical School, Sydney University).

REMARKS ON CHRONIC BRIGHT'S DISEASE—NO. II.

By ANGEL MONEY, M.D., F.R.C.P. LOND., SYDNEY.

TWENTY years ago a fellow student of mine had albuminuria, supposed to be due to renal sclerosis, following scarlatinal glomerulitis. He is still alive and well with albuminuria. He has no enlargement of the heart, no high blood pressure, and no retinal disease. The albuminuria has varied much, in harmony with changes in his environment. It is evident he has a leaky kidney, but like some spinal sclerosis and most cutaneous scars, the cause of the leak grows no worse and even now remains as the sole vestige of an ancient process. I well remember the numerous experiments we made on the influence of food, exercise, posture and diet. It was the erect posture in his particular case which had the greatest influence in increasing the percentage of albumen in the urine. Active exercise in the recumbent posture failed to increase albuminuria, and the same held good of massage and passive movements in the same posture.

As there was no doubt the nephritis followed scarlatina, the inference that infective glomerulitis is not always followed by progressive sclerosis seems a fair one, albeit by no means proven. A pure milk diet hardly had any influence on the albuminuria which was most marked during the afternoon.

Although the chemical anatomy of the albuminous molecule appears to have something to say in the pathology of albuminuria, yet it has been thought that the varying reaction of the blood may have a share in the causation. An acid solution of albumen diffuses readily, whilst a solution of alkali albumen hardly diffuses at all. The researches of Saundby on this point seemed to show that variations in acidity of the urine may determine the amount of albumen; the influence of food in diminishing the acidity of urine should be borne in mind. Even a slight change in the reaction of the fluid in which the albumen is dissolved may alter the chemical and physical nature of the albumen.

"*Ab uno disce omnes*" by no means applies to cases of albuminuria. In contrast with the above-mentioned case, active exercise in the recumbent posture may increase, and massage with passive movements may augment albuminuria. A monopoly of diurnal variation is not held by physiological, cyclical albuminuria. The variations in the percentage of

albumen from hour to hour during the day and night are very considerable in cases in which no doubt exists that the renal anatomy is pathological.

In cases of contracting kidney the percentage of albuminuria is usually small if the amount of urine discharged is great and the blood pressure high. It is generally conceded that the higher the pressure the more water is passed and the less albumen. My experience of the use of erythrol tetranitrate in cases of high blood pressure and albuminuria seems to show that lowering the blood pressure with this substance increases albuminuria and diminishes the amount of urine discharged in the twenty-four hours. Although erythrol tetranitrate seems to relieve dyspnoea and palpitation, and headaches occurring in advanced contracting kidney, it does not appear to improve the patient's general condition in all cases; the sense of weakness was greater in two cases. It perhaps seldom happens that the vascular tension is in excess of nature's requirements. Purgation with bitartrate of potash or Epsom salts often removes headache, and lowers blood pressure with temporary improvement of the patient's condition; yet patients who resort to these apparently wholesome remedies have to continue their use—a very mixed matter on which to theorise.

The headache of chronic Bright's disease with high blood pressure is very generally increased by the use of such increasers of tension as caffeine, digitalis and squill, but not always. The old practitioners taught that opium and mercury were agents to be avoided in cases of renal disease. Of the unwisdom of this advice in regard to the use of morphia we have had abundant illustration, for a better remedy to alleviate suffering in uræmia associated with fair blood pressure does not at present exist. I strongly suspect that the use of opium was condemned from the seemingly baneful effects which follow its employment in acute nephritis and large white kidney—cases with low blood pressure and a tendency to anuria, cases in which giving enough morphia to cause a drowsiness would be obviously ridiculous. Even in cases of anuria an infinitesimal dose of morphia, such as would cause only nerve and tissue stimulation, might prove beneficial. In regard to the non-use of mercury, the advice is decidedly good; yet there are cases, I cannot say conclusively of primary Bright's disease, in which mercury must be used to get rid of dropsy. This was recently again demonstrated to me in the person of an individual, aged 54, in whom the dropsy pill of blue mass, digitalis,

and squill removed considerable anasarca. Fear of the onset of ulcerative gingivitis made one chary in the use of the mercury and anxious not to use it as soon as the anasarca disappeared; but it was found that digitalis, squill and caffeine were not competent to prevent dropsy, and so the mercurial dropsy pill had to be continued. There has not been any tendency in this case to disease of the gums, probably because the patient is almost edentulous; neither has salivation occurred.

TWO CASES OF SPONTANEOUS RUPTURE IN THE PARTURIENT CANAL DURING LABOUR.

By H. C. LLOYD, M.B., C.M. EDIN., ASSISTANT MASTER, ROTUNDA HOSPITAL, DUBLIN.

THE first of these was a case of Rupture of the Uterus. The patient was a woman of intemperate habits who, although her husband was earning good wages as a carpenter, was living in absolute misery, and it was with difficulty that I could obtain even hot water for the necessary manipulations. The case was as follows:—

M. McE., 6-para, *æt.* 46, with history of normal labours previously, the last one being some years ago. She was seen by a senior student of the hospital, a man qualified for a couple of years, at 11 p.m. The pains were then weak and coming at long intervals. After waiting an hour and finding the patient was still in the first stage making very little progress the student left, instructing the friends to call him when pains became strong. He was called at 4 a.m. and found labour progressing satisfactorily, the os being then the size of a five-shilling piece. Everything went on well for an hour when, during a pain, there was a discharge of blood from the vagina.

On examination the os was found to be about two-thirds dilated and the vertex presenting. Shortly after this the contractions became more frequent and violent, with severe crampy pains in the lower abdomen. Pulse, 130 per minute, and the patient said she was dying. On my arrival I found the patient almost collapsed, her face grey in colour. She was tossing her hands about in a listless manner, and her speech was incoherent. The pulse was so feeble that I could scarcely feel it, its rate being 145. Uterine contractions had absolutely ceased. Gentle abdominal palpation gave her great pain, and the breech of the child could be felt with startling distinctness considerably above the umbilicus and on the right side with a soft elongated swelling, which felt like a

distended bladder, on the opposite side, extending almost to the costal margin. The head was well fixed in the pelvis, and the cervix almost retracted. A catheter was passed with some difficulty, and about two ounces of pure blood came away. The catheter could be felt by the vaginal finger to be in the bladder. As the patient was tossing about too much to enable the forceps to be applied without anæsthetic a small quantity of chloroform was administered notwithstanding her serious condition. While traction was being made the forceps slipped. They were removed but whilst reapplying them the patient's condition became so grave that artificial respiration was had resource to. This was without avail, and patient died half-an-hour later undelivered.

Unfortunately a *post mortem* examination could not be obtained to ascertain the exact condition, but from palpation after death, when it had hardened considerably, I have no doubt that the soft tumour felt on the left side was the uterus lying free in the abdomen beside the body of the child, which had completely escaped from a rent in the lower segment, the head at the same time being fixed in the pelvis. From the result of the passage of the catheter I conclude that the rent, as is sometimes the case, extended through the wall of the bladder. In this case there were only a few violent pains occurring in a storm just before complete dilatation, and the tissue of the lower uterine segment in an elderly alcoholic subject was too friable to resist the contracting power of the upper segment, and before the head could escape it gave way. There was no warning of rupture given.

In the second case the rupture occurred further down the parturient canal. It also has some points of interest.

M. G., 12-para, æt 36, gave the history of several abortions and great difficulty with each full-time child. In every case forceps were used, and the difficulty has become greater with each succeeding birth. When first seen, this patient, a big stout woman, was in labour, the child presenting by the breech. The os was the size of a five-shilling piece, membranes ruptured, and the presenting part just in the brim of the pelvis. Labour went on normally for a couple of hours, and as little advance was being made, and as the retraction of the cervix was complete and the extern assistant failed to effect delivery, he sent to the hospital for further assistance.

On examining the pelvis I found the breech so high that it was with difficulty the tip of the

finger could be passed into the fold of the groin, and directly traction was made a pain forced the presenting part down and pinched the finger between the child's breech and a very prominent ridge which ran transversely across the sacrum at the level of the junction of the second and third sacral vertebra so forcibly that flexion of the finger could no longer be maintained. Patient was watched for a short time, and assisted during the pains by pressure on the fundus in the hope that the breech would mould sufficiently to allow its passage. This failing, a bent catheter was passed over the posterior groin, but the thighs of the child were so close together that it was impossible to draw a fillet of gauze between them. With the patient under an anæsthetic the finger was gently passed up the anterior surface of the presenting part and a foot felt resting on the brim of the pelvis, and at the same time a rent was diagnosed in the vaginal fornix on that side not involving the cervix. The foot was carefully drawn down, and the breech delivered. The delivery of the shoulders gave some trouble, as the arms were extended, as was the head. This was delivered by the Smellie method. The cord was pulsating feebly, but all efforts at resuscitation failed. On passing the hand into the vagina the placenta was found detached and was removed. On reintroducing the hand it passed through the rent which was formed by the circular detachment of the vaginal walls from the cervix over nearly a half of its circumference, and the well-contracted uterus could be grasped by the hand from between the layers of the broad ligament, inside which lay some blood clot. This was washed out, and 18 yards of iodoform gauze two and a-half inches broad was packed into the cavity. Some of this was removed next day and the remainder on the third day. There was wonderfully little hæmorrhage, and the patient made an uneventful recovery, and has since been seen several times attending to her ordinary duties.

Rupture of the vagina is a more rare complication than that of the uterus, the average being one to three. It occurs through any obstruction to the escape of the fœtus after full dilatation and retraction of the cervix, and is caused by powerful contractions of the uterine muscle, which continued retraction of the cervix when the vagina, being the weakest part, gives way. The tear is usually circular, and may occur at any part of the cervico-vaginal junction, and in a few cases the bladder has been torn. A very few cases have been recorded where complete separation has taken place, and in a few the child has escaped from

the uterus. Usually the tear involves the peritoneum, and is then very dangerous. The causes assigned are—1. Diseases of the vagina; 2. Disproportion between the child and pelvis; 3. Osseous irregularities in the pelvis, and Dr. McClintock, a former master of this hospital, who looked up the literature of the subject, says, "In every case I know of, the head was presenting." It may be noted that contraction at the brim of the pelvis is more likely to cause uterine than vaginal rupture. The prognosis is always grave, but not so much so as the uterine, and the symptoms of both are similar, being of course more marked when the peritoneum is involved.

A CASE OF A MELON SEED IN THE LEFT BRONCHUS—OPERATION—RECOVERY.

BY G. W. ARMSTRONG, M.B., B.S. MELB.,
CANTERBURY, LATE OF CORRYONG, VIC.

As cases of foreign bodies in the bronchi are always interesting to record, the following notes will perhaps not prove exceptional:—I was called to attend a child 18 months old, at some distance from Corryong, who was apparently suffering from bronchitis, with marked distress of respiration and elevated temperature. The history given was, that nine months previously, whilst the child was playing with melon seeds one of them had been sucked into the windpipe. Since this time there had been frequent violent paroxysmal attacks of coughing, during some of which the parents thought the child must succumb. On examining the chest I found evidences of the seed being impacted in the left side, where the breathing was seriously interrupted, very little air entering a larger part of the base of the lung. I prescribed for the case, and after a few days' rest in bed, the condition being much improved, I advised her removal to Dr. Woods of Albury, for the purpose of operation. The following are the

NOTES OF OPERATION BY W. CLEAVER WOODS,
M.D., CH.M. EDIN., HON. SURGEON TO
THE ALBURY HOSPITAL.

On an examination of the child's chest the indications were very clear that the left bronchus was obstructed, and the lung beyond partially collapsed. As far as I could ascertain the foreign body was not tightly fixed, but rather had an interval in the tube—perhaps an inch or so in length—up and down which it slipped with respiration, and more particularly with forced or deep respiratory effort. I waited

a few days to observe a paroxysm (perhaps a dangerous latitude to allow in view of so clear a history and physical signs); I had not to wait long, for during an ordinary visit to the private hospital, two days after the child's arrival, she was overcome quite suddenly with a terrible convulsive fit which looked very like instant operation to save life. The same afternoon I opened the trachea in the usual way, placing the handle of the scalpel in the tube crossways, and holding it there well against the posterior wall. The usual violent respiratory action which immediately followed, served to dislodge the seed, and it was twice ejected against the handle of the knife, each time, however, being sucked back into the bronchus. The opening was now enlarged with a scissors upwards and downwards and the blade of the knife depressed towards the chin, whereupon the offending element, after an incarceration of over nine months, was blown upwards along the handle of the knife and clean out on to the table. The trachea was immediately closed with catgut sutures, horsehair being used for the superficial tissues. The child made an uninterrupted recovery, and was sent home quite well in five days after the operation.

NEW PREPARATIONS BY C. J. HEWLETT & SON.

We have received samples of the following preparations from Messrs. C. J. Hewlett & Son, of 40, 41 and 42 Charlotte Street, London:—

Tests for Urinary Analysis.—Hewlett's Alkaline Bismuth Test for sugar: Of this preparation, one part of the urine to be well boiled with nine parts of the alkaline bismuth test; the liquid will become brown to a deep black, according to the amount of sugar present. Hewlett's Trichloroacetic Acid Test for albumen: A little of this test fluid to be poured carefully down the side of a test tube in which a small quantity of the urine has been placed, when, if albumen be present, a well-marked turbidity or turbid zone will be produced. We have tried both these tests with excellent results.

Antiseptic Preparations.—Hewlett's Antiseptic Pellets (perchloride of mercury): One dropped into a pint of water forms a delicately coloured solution of 1 in 2,000 of perchloride of mercury. Hewlett's Antiseptic Otto Jelly and Hewlett's Antiseptic Cream are elegant preparations in collapsible tubes, the former as lubricant for gynecological examinations, the latter an emollient cream for acne, eczema and all abrasions and eruptions of the skin.

LINNEAN SOCIETY OF N. S. WALES.—Intimation is hereby given that the Macleay bacteriologist, Mr. R. Greig Smith, M.Sc., is now established at the Society's Hall, Elizabeth Bay, in a laboratory fitted up with every modern appliance for bacteriological investigation. The annual subscription to the Society is one guinea. Members elected during the current year are not required to pay the usual entrance fee. J. J. Fletcher, Secretary.

CANCER OF THE ASCENDING COLON— EXPLORATORY LAPAROTOMY— INDUCTION OF PREMATURE LABOUR—COLECTOMY BY PAUL'S METHOD—RECOVERY.

By R. STEER BOWKER, M.R.C.S. ENG., SURGEON
TO THE SYDNEY HOSPITAL.

THE case I am about to read to you is one I think of great interest, showing as it does, the difficulties in the way of an early and accurate diagnosis, and the means by which a very serious operation was carried out, with very little loss of blood, and very slight shock; I mean by Paul's Method, he having arrived at this safe and ingenious plan by reason of a bad experience of the immediate union of the ends of the gut. In the *British Medical Journal* of May 25th, 1895, may be seen his report on seven operations, the three first of which died as a direct result of the operation, and being done by immediate union of the divided gut. His next case died as the result of an operation for the resection of the gut and "immediate union" for the relief of the faecal fistula, left after the "operation in stages," which so far had been successful. The next three cases, done by the method I am about to describe, were, as far as the operations were concerned, successful; one man dying seven weeks after the operation of uræmia, one woman dying four months afterwards of diarrhoea, and the other eight months afterwards, of a recurrence of the disease.

My case has now been done twelve months, and expresses herself, as being in better health, than she has been in for years.

The late Greig Smith has stated that "the mortality after resection of cancerous intestine, is about 40 per cent.; Weir's statistics of 33 cases of completed resection, give a mortality of 51 per cent.; Kendal Franks collected 51 cases of colectomy for cancer, in which the mortality was 40·8 per cent." He goes on to say that "a tabulation of recent cases, might bring the mortality under 40 per cent., but probably over 30 per cent.," and this in the hands of the most experienced surgeons. The operation of removing part of the intestine is, therefore, one of very grave danger to the patient, so that if by any plan of operating this high mortality can be reduced, it is right, and good surgery, to take advantage of that plan, even though it result in leaving a patient with a faecal fistula. No doubt it is fine to excise the neoplasm, and immediately suture the cut ends of the intestine, by means of one of the various devices invented by ingenious minds for the purpose, return the gut to the abdominal cavity, and with a flourish, stitch up

the external abdominal wound. It is no doubt one of the "triumphs of surgery," but what of this when the patient dies; it is not much consolation to find by the *post mortem*, that the junction "did not leak." In these cases, generally, the patient is greatly pulled down, and not well fitted for a prolonged operation, which should be as short and expeditious as possible, and the intestine handled no more than is absolutely necessary, for every minute saved is of very great importance to the patient, besides which is the risk of the stitches of an enterorrhaphy giving way, or of gangrene from the pressure of a Murphy's button; whilst on the other hand, there are only two things which can be urged against Paul's Method, and they are prolonged convalescence, and the fact that a faecal fistula *may* be the result, these, I think, in so grave a matter, are of but little moment.

Greig Smith describes an operation (and rightly recommends it in preference to immediate suture), which he calls "resection in three stages," where he leaves the neoplasm hanging out of the abdominal wall, with an india-rubber drainage tube in the proximal end of the gut; this, I think is unnecessary, as in Paul's operation it takes hardly any time to at once remove the growth and so get rid of the mass.

DR. WORRALL'S NOTES:—

MALIGNANT DISEASE OF COLON—EXPLORATORY LAPAROTOMY—MISCARRIAGE BROUGHT ON— REMOVAL BY PAUL'S METHOD.

Catherine P., *æt* 38, married—Patient has been married 19 years; has had eight children, eldest is aged 18 years, youngest 2 years and 3 months. Has had no miscarriages; periods first began at 13 years of age; has always been regular every four weeks until birth of last child, since which time they have been irregular, scanty, but not attended by pain until ten weeks ago, since which time she has not seen anything.

She complains of being constipated, has pain in the epigastrium when bowels act, and also "bearing down pain" at that time, and a slight pain in the back. For the last two years, has at times noticed a slight discharge of blood and slime, from the back passage.

Per vaginam.—Uterus is enlarged to about the size of a cocoa-nut, there is slight laceration of the cervix, and its lips are soft, more so on one side. Behind the uterus and to the right, can be felt a hard mass freely movable.

Taking this to be a dermoid of the right ovary, Dr. Worrall decided to operate.

August 4th, 1898.—Under ether. Dr. Worrall made an incision in the middle line below

the umbilicus, about four inches in length, passed his hand down to the right side of the pelvis, felt the mass, and brought it into view. This proved to be a growth in the ascending colon; it was dropped back into the peritoneal cavity, and the wound stitched up.

August 14th, 1898.—Wound healed by primary union. After a consultation, it was decided to bring on a miscarriage, and then transfer to one of the general surgeons for removal of the growth.

Dr. Worrall, therefore, explored the uterine cavity with a sound, and the foetus was easily felt. The uterine cavity was plugged with glycerine gauze; pain and bleeding came on at 3 a.m.; gauze was taken out, and vagina plugged with lysol swabs. Foetus was born at 8.30 a.m. The membranes were removed and uterus curetted, and the cavity plugged with iodoform gauze. Temperature, 100°.

August 16th, 1898.—Temperature, 99°. Gauze removed; no pain or vomiting.

August 28th, 1898.—Made a gradual recovery, and was transferred to general surgical ward under Dr. Bowker.

September 1st, 1898.—On deep pressure in right iliac region, one can feel an ill-defined resisting mass. Patient appears to have recovered from both her former operations and is in fair condition, the bowels acting by means of medicines. She has not complained at any time of trouble to any extent in the bowels.

September 5th, 1898.—Ether. I made an incision, obliquely, to the inner side of the anterior superior spine of the ilium as for an appendectomy, and came without difficulty upon a mass in the ascending colon about the size of a mandarin orange, rather firmly fixed by a thickened meso-colon. I then gradually freed the growth, and about three fingers breadth of gut on either side from its mesenteric attachment, ligaturing each vessel or bleeding point as I came to it, thereby losing but very little blood, and in doing so came across some enlarged glands, which I removed. Having delivered the growth from the wound, I made an incision into the healthy gut above and below the growth and inserted into either wound a Paul's intestinal drainage tube (having previously plugged the external end with a swab), then tied in each tube with a ligature encircling the gut, and so staying all bleeding when I cut the growth away (the swabs preventing any leakage from the intestine during further manipulation).

The wound in the mesentery was then brought together with cat-gut, and the two tubes of intestine sutured together as low down as possible by their contiguous surfaces (so as to

make a well defined "spur" to allow of the free use afterwards of the enterotome) leaving the two ends of intestine protruding from the wound and fastened together as Paul describes it "like the barrels of a double barrelled gun." The wound was then closed above and below by a few silk-worm-gut sutures passing through all the layers of the abdominal wall, the suture nearest the gut on each side being passed through the outer wall of the gut to help retain it in position. The wound was dressed in the ordinary manner, and the patient conveyed to the ward, where the plug was removed from the tube in the proximal end of the gut and an india-rubber tube attached to convey fæces to a dish outside the bed.

The patient lost little or no blood by this operation comparatively speaking, suffered but little shock, and rapidly recovered; the temperature hardly going above normal, and she was almost immediately on ordinary diet.

Pathologist's Report—Cylindrical celled carcinoma almost closing the lumen of the gut. The tubes came away in five or six days, leaving the wound nicely healed around an ordinary colectomy opening.

September 17th, 1898.—Applied Dupuytren's enterotome to the spur (having first passed a finger down each tube of gut, to see how far the instrument could with safety be applied, and found that distance to be about 2½ inches), on one side, and a pair of polypus forceps to the other.

September 24th, 1898.—Most of the spur destroyed; again applied more forceps. (This little operation giving the patient little or no pain).

September 30th, 1898.—Spur destroyed; passing most of her fæces per rectum.

October 17th, 1898.—As fecal fistula had not closed, under ether cut down and freed the rosette of mucous membrane from the skin, and brought the edges together; then fastened the skin edges and closed it over the gut.

October 25th, 1898.—Slight giving way of wound, through which a small amount of fecal matter passes if bowels are loose.

December 20th, 1898.—Has not quite closed, though causes her so little inconvenience that she prefers to go home as she is, which she does well pleased, and having put on considerable weight, and expresses herself as feeling splendid.

Exhibit.—Excised piece of gut and growth, about nine inches.

Concerning the diagnosis of this case. The patient's account of her symptoms, when she came to the hospital, pointed more to the fact that she was suffering from some gynecological trouble, and consequently, she was placed under

Dr. Worrall's care; and it is due to the fact that he made an exploratory celiotomy that I got the case to operate upon as early as I did before there was complete obstruction, the symptoms not at any time showing that she had malignant disease of the gut; for a little "slime and blood" might be passed occasionally, and mean but very little.

I have to thank Dr. Worrall for lending me Paul's tubes. I would have liked to have brought one down to show the meeting, but unfortunately, Dr. Worrall tells me that one was returned broken, having been sent to an instrument maker as a pattern to make some by, and so I did not like to ask him again to lend me one.

The specimen handed round is the growth removed. I will now ask the patient to come in and show herself. You will see that she is healthy-looking and stout (having gained about three stone in weight), and that the fæcal fistula is closed.

(For discussion on this paper see page 401.)

ICHTHYOL IN WHOOPING COUGH.

BY J. FRANCIS SOUTER, M.B. ABERD. AND
ADELAIDE, S.A.

SEEING the number of deaths recorded each month from pertussis and its complications, I would like to mention my experience with ichthyol during this last epidemic. Dr. Pooler, of Stirling, kindly drew my attention to an article by Dr. Cerverato, of Padua, on the subject, and as my own children were suffering severely at the time, the ordinary bromide and belladonna treatment being very unsatisfactory, I had some pills made up and commenced with gr. i. every four hours.

I put four of my children on the same dose, their ages being from two years and six months to eight years. In two days the dose was increased to grs. ii., then to grs. iii. and grs. iv. every four hours. At the commencement of treatment, the paroxysmal cough occurred about 25 to 30 times in the 24 hours; after four days of the ichthyol, the number of bouts was reduced to about six in the 24 hours; and at the end of the week from two to three. All the other symptoms improved correspondingly. I was so pleased with the result, that I tried it in ten other cases with almost uniformly favourable results. The only failures I had, were when I employed too small a dose. I saw no unpleasant effect in any case from the administration of ichthyol; all the children taking well. I shall be very glad to learn the opinions of others who may have tried ichthyol in pertussis.

CASE OF TROPICAL ABSCESS OF LIVER.

BY DANIEL P. O'BRIEN, F.R.C.S.I., ETC.,
RAVENSWOOD, QUEENSLAND.

IN view of the very high mortality amongst cases of the above nature, the following notes may be of interest to your readers.

On the 27th November, 1898, was called to see Mrs. B., aged 44 years, who had suffered from diarrhoea off and on for three weeks. For the past three days confined to bed complaining of pain in stomach and bilious vomiting. On examination, temperature 102.5° F., pulse 120. Tenderness and swelling in region of left lobe of liver, yellowish tinge of the conjunctivæ. The swelling, which could easily be defined towards its lower border, was noticed to move under abdominal wall during respiration, causing a "catching pain." The edge of the right lobe could be felt just below the costal margin. Spleen also enlarged.

November 29th, admitted to hospital, and during the following fortnight tumour showed a daily increase in size, and the temperature ranged from 99° F. in the morning to 103° F. evening.

December 14th.—Fluctuation detected and needle passed deeply; at first only blood entered syringe, but during its withdrawal sero-purulent fluid and shreds of lymph were noticed. A vertical incision was made and a defined cavity three inches in diameter, evacuated of pus and serum, showing on its base the surface of the left lobe of the liver indurated and much enlarged. Owing to the soft nature of the adhesions protecting the peritoneal cavity, the abscess was at first cleaned by suction with a glass syringe. Subsequently it was irrigated with sterilised, normal saline. The following morning temperature fell nearly to normal, but next day assumed the intermittent character it previously had, sometimes falling below normal in morning and reaching 101° F. or more in the evening.

December 31st.—Edges of wound pale and unhealthy. Left lobe extends from the ensiform cartilage nearly to the umbilicus, and projects forwards so as to be visible under the binder. Temperature of a hectic character, 103° F., last evening. Six motions daily, very watery and offensive, and tinged with blood. Needle passed into substance of liver, removing sanguino-purulent fluid. I should state that palpation had long previously shown the existence of fluctuation, but, knowing the fatal nature of such cases even when opened, I was reluctant to interfere. After carefully cleansing

wound and superficial abscess, the surface of the liver was incised, exposing a very irregular cavity filled with broken down hepatic substance which was removed by suction, and twisted strips of iodoform gauze inserted. Patient passed a fair night. Diarrhœa continued, but no blood, the latter probably on account of the low state in which the patient was; even requiring assistance to turn in bed. This was done with a view to prevent bed sores, which were likely to form on account of the prolonged dorsal decubitus.

January 21st.—Temperature intermittent, but not so high. Cavity in liver getting larger, and wound in abdominal wall which is two and a half inches long admits dressings as easily as when first made. There is no sign of the natural contraction usually found in healthy tissue. A one per cent. quinine solution used to syringe morning and evening, alternating with potassium permanganate. Patient complains of cold feet, cramps in legs, and feelings of syncope. Diarrhœa continuous, with blood and mucus occasionally. The stomach now began to reject mixture, the latter consisting of :

R Bismuth Carb., 3 iv.
Laudanum, ℥ 80.
Pulv. Ipecac. Co., gr. 40.
Spirit Myristica, 3 iv.
Aque ad., 3 viii.
Quartis Horis, 3 i.

followed by a teaspoonful of castor oil and a tablespoonful of brandy and water. We therefore resorted to washing out the lower bowel with two pints of saturated boric solution. temperature 90° F. each morning; and 1 in 1,000 quinine solution each evening, followed an hour after with an enema of starch 3 vi., laudanum ℥ 15, and pulv. ipecac. grs. x. This latter was generally retained a few hours at first, and later on, altogether. The dysentery steadily diminished. At the end of a fortnight stools assumed some firmness and only came away with large injection, which was then discontinued, and patient again took above mixture by the mouth. The food consisted of thin arrowroot, peptonised milk, and tablespoonful doses of brandy.

On the 27th January, a second smaller hepatic abscess opened spontaneously a little to the right of the original and on the floor of the epi-hepatic abscess. Until all diarrhœa had ceased, and for a week afterwards, disintegration and enlargement were the principal changes taking place in the liver cavity.

From the 1st February a distinct improvement took place and continued until healing was complete, five weeks subsequently.

The dysentery did not return, and patient was discharged on the 5th March, 1899.

Examined her on the 25th May, and found dulness of left lobe, little more than normal. Appetite and bowels were then natural.

The above case clearly bears out Dr. Fiaschi's suggestion in your issue of December 20th, 1898, wherein he draws attention to the difficulty of freeing the liver from the amœbæ coli by a spray of acid solution of quinine, which is well known to be fatal to them and at the same time comparatively harmless to living tissue; whereby he deduces that there must be some source of supply, viz., the ulcerated bowel from which the poison carried into the circulation is deposited in the liver. He therefore suggests vigorous treatment against the disease in the lower bowel. This we did by two different injections daily; the first advocated by Foquet, of Cairo,* and the other by Osler, of U.S.A. There are several other well-known authorities who employ similar treatment by injection, prominent amongst whom are Dujardin-Beaumetz and Professor Whittaker.†

I was unable to verify my diagnosis by a microscopic examination with a view to finding the amœbæ owing to want of proper instruments, but I think with the evidence before us and the fact that they have been found constantly present in the stools of tropical dysentery,‡ there will be no doubt on your mind that they were the *fons et origo mali* in this instance.

In 1896 I met with two cases of tropical abscess of the liver in natives of the Niger, West Coast, Africa; both succumbed after a long illness. When visiting the city hospital at Para, South America, half a year later I saw three more, and the surgeon there informed me that they invariably die. I recollect one case of recovery in a patient of Surgeon Tobin's at St. Vincent's Hospital, Dublin. He had been a soldier and resided a long time in India, where he suffered from repeated attacks of dysentery. There was no symptom of this latter during his recovery, and no doubt, if there were any latent dysenteric ulcers at the time, the diet and rest may have caused them to heal. This case merely *negatively* shows that tropical abscess may be successfully treated, when the source of infection is removed; but my case is one which proves *affirmatively* that a cure has been effectually wrought, after the disappearance of the dysenteric symptoms, which was effected by treatment.

* "Traité pratique d'Antiseptique," p. 387.

† Pepper's "System of Medicine."

‡ Burney Yeo, "Manual, medical treatment," vol. i, p. 233.

HAMMER-TOE.

BY CHARLES MACLAURIN, M.B. EDIN., HON. ASSISTANT SURGEON TO PRINCE ALFRED HOSPITAL AND TO THE WOMENS' HOSPITAL, SYDNEY.

HAMMER-TOE is one of those trivial ailments that cause more suffering than many far more serious diseases. Usually attacking the second toe, frequently of both feet, it consists in extension of the metatarso-phalangeal joint, and flexion of the proximal inter-phalangeal joint of the affected digit, while the distal inter-phalangeal joint is extended. A corn soon forms on the dorsal aspect of the proximal inter-phalangeal joint, owing to pressure on the prominent head of the first phalanx, and this corn is the source of much annoyance. Another corn occasionally forms beneath the terminal phalanx. Both feet may be affected, not necessarily simultaneously, and such a patient is practically a cripple, and will submit to any procedure likely to cure him.

Hammer-toe usually begins in childhood, but rarely becomes marked till about the age of puberty, when attention is called to it by the painful corn upon the dorsum of the toe, and the patient, as a rule, comes to the surgeon, after having tried various corn plasters, with his trouble sometimes increased thereby. The condition is seldom seen in its early stages, when, indeed, it would not be easy to diagnose with certainty. The common experience of hammer-toe is that it invariably tends to progress slowly but surely, in spite of all mild remedial measures; and one may confess to doubts about the nature of those cases which have been cured in their early stages in childhood by various forms of shoes, splints, and other apparatus.

Pathology.—At first there is simple flexion of the proximal inter-phalangeal joint, but in time certain alterations in the bones occur.

The epiphyseal cartilage at the base of the second phalanx does not ossify until the twentieth year. Owing to the flexion of the joint there is unequal pressure upon this epiphysis, which grows most rapidly wherever there is least pressure, *i.e.*, on the plantar aspect of the base of the phalanx, forming a kind of spur which tends to project beneath the first phalanx. The head of the latter possesses no epiphysis, but nevertheless a certain amount of enlargement appears to take place where pressure is abnormally small, *i.e.*, on the dorsal half of its articular surface; a kind of osteophyte may form which in time assists the spur on the second phalanx to prevent extension of

the joint. The condition thus becomes permanent, and the toe cannot be returned to a normal position, even under anæsthesia, without fracturing the obstructing portions of bone. There is also a band of plantar fascia which becomes tense when extension is attempted.

Cause.—Many causes have been assigned for hammer-toe, none of which, I venture to think, entirely satisfactory.

1. *Ill-fitting boots.* It is not easy to see how these can cause hammer-toe, at any rate, when acting alone. We must suppose that the end of the boot presses upon a second toe which is longer than the hallux; if it be shorter, of course, no pressure can be so exerted. In modern European nations the second toe is rarely longer than the first, although in ancient times this was not the case, to judge by Greek statues.

When an abnormally long second toe is flexed by longitudinal pressure from the boot end, it will be thus shortened, and will gain shelter by the first and third toes alongside it taking the pressure of the boot. Why, therefore, if hammer-toe is caused by this pressure do these toes so seldom become affected? And why does the second toe continue to become still more strongly flexed, long after the end of the boot can have pressed it at all? Another point, when the joint is flexed, the boot pressure is exerted from above downwards, and would thus rather extend the toe, or at any rate prevent further flexion; but we see that flexion increases in spite of this tendency. How strong this downward pressure must be is proved by the large corn that forms where it is exerted. It, therefore, seems to me highly improbable that short boots can be a marked cause for hammer-toe; nor does it seem clear how ill-fitting boots of any description can excite this condition. Mr. Jacobson says that "the first and fifth toes are driven under the others, which, owing to the scanty room, become displaced into the position of hammer-toes." If one tries to flex one's toes like hammer-toes by pressing the big and little toes under them, one will find considerable difficulty, especially as the effect of a tight boot upper is not to flex but to extend the inter-phalangeal joints.

2. *Contraction of the flexor tendons, or weakening of the extensors.* This may, perhaps, be caused by infantile paralysis, but clearly this can be a cause in only a small proportion of cases. Infantile paralysis rarely confines itself to so small a muscular area as the extensor of one toe.

3. *Contraction of the digital prolongations of the plantar fascia, resembling Dupuytren's*

contraction in the hand. Or the plantar fascia may not grow *pari passu* with the bones, which become markedly longer* about the time of puberty; as the fascia does not grow with them the inter-phalangeal joint must become flexed. Probably this is the real nature of the process, but we are still ignorant why it so commonly attacks the second toe, and so seldom the others, and why the fascia should take on this action at all.

4. Wasting of the interossei is said occasionally to cause hammer-toe.

It is thus seen that the real cause of hammer-toe is uncertain. As in the case of varicose veins, it is now clear that we do not reach finality by talking vaguely of some obvious physical cause, such as tight boots or garters, but that the real root of the matter is still unknown.

Treatment.—This may be divided under four heads:—

1. Orthopædic apparatus, such as iron soles, pads, splints, etc., of innumerable variety, and alike only in their futility. If a case of hammer-toe were really seen early, and patiently kept in splints until the bones were full-grown, it is not impossible that a cure might result, but such cases are, to say the least, rare.

2. Division of plantar fascia or flexor tendons. This results in the divided structure cicatrising and contracting on its own account, thus usually making matters worse. Sometimes persevering after-treatment on splints or iron

* See Quetelet's table shewing height in relation to weight and age in Landolt & Stirling's *Physiology*, Vol. I., page 459, fourth edition.

Although these figures refer to the French, they are sufficient to show the growth of the long bones at various ages with which we are now concerned. I quote a few figures:—

Age.	Height in Centimetres.	
	Male.	Females.
12 ...	135.9	132.7
13 ...	140.3	138.6
14 ...	148.7	144.7
15 ...	155.9	147.5
16 ...	161	150
17 ...	167	154.4
18 ...	170	156.2

In France, puberty is at 12 to 14 in females, and a little later in males; such appears to be the case also in this country, as distinguished from Great Britain, where the age of puberty averages 13 to 15. It will be observed that growth in females is exceptionally rapid from 12 to 17, when it begins to tail off; in males the most rapid growth is from 13 to 17. This growth occurs mainly in the long bones of the limbs, and there can be little doubt that the toe-bones share in the general elongation, though I can find no statistics of them. If the fascia should stop growing at this period, it can readily be seen how hammer-toe could be produced.

soles may check this tendency, but the method is, I believe, quite untrustworthy, and is now seldom performed.

3. Amputation is the ordinary treatment for hammer-toe, but I cannot help thinking that it is at best a counsel of despair, and thus not to be resorted to if we can avoid it; although the patient is, as a rule, only too willing to have the offending digit removed. We are apt to forget that the smaller toes, though less important than the corresponding fingers, are by no means valueless, especially to such men as sailors, firemen, and other climbers, who depend largely upon the toes for retaining their grip when aloft, or on slippery surfaces. A four-toed foot is distinctly less valuable to such a man than one with five toes. Another objection to amputation is that it leaves the hallux unsupported on its outer aspect, with the result that its phalanges may be easily forced outwards, leading to the formation of a bunion, which is as bad as hammer-toe.

4. Excision of the flexed joint is the best treatment for hammer-toe, if the patient can afford the time and trouble. It leads, if carefully performed, to a nearly normal toe, without tendency to recurrence. It acts (a) by removing the bony obstacles to straightness; and (b) by shortening the bones, since we cannot lengthen the fascia and tendons. The operation is troublesome. The following may be taken as a typical case:—

Male, aged 17, complained of a corn on the dorsum of the second left toe. There was marked over-extension of the first phalanx, and strong flexion of the second, while the third was extended. A band of plantar fascia prevented straightening of the joints. The corn had lasted two years, and was growing much worse. Patient wanted the toe amputated, having heard that there was no cure for the condition. The second right toe was in a somewhat similar state, but no corn had yet developed, the flexion was much less marked, and the joints could be straightened. He had never worn tight boots or shoes—indeed, he was a boot-fitter by trade. Patient was anaesthetised, a tourniquet applied, and an incision $1\frac{1}{2}$ inch in length made on the inner side of the toe, right down to the bones, between the plantar and dorsal digital vessels and nerves. With some difficulty, owing to distortion of parts, the joint was demonstrated, and its lateral ligament cut through. The ends of the bones could not be made to protrude, so a similar incision was made on the outer side, and the outer lateral ligament incised. This freed the bones. The head of the first phalanx was cut through with

sharp bone forceps, and a spur was then found running down under the flexor tendon from the base of the second phalanx, like a sesamoid bone. This prevented extension and was cut away, allowing the bones to fall into good position. A catgut drain was left in, and the toe put up in extension with a piece of elastic. The wound healed by first intention; at the end of a fortnight it was taken down; there was firm fibrous union; passive movement was begun, and the patient could walk in perfect comfort at the end of a month. The corns have not yet disappeared, but he tells me they give him no trouble.

It will be noticed that the epiphysis at the base of the second phalanx was not entirely removed. At the age of 17 there is not much chance of undue growth occurring, as the cartilage ossifies at 19 or 20, and probably, the inflammation following excision will hasten this process.

As he suffered no inconvenience from the right toe he did not care to have it operated on. He will wear a steel splint till the epiphyseal cartilage ossifies; possibly the fascia may then yield a little, and the toe in time return to normal.

It is only fair to state that the operation of excision is not invariably so successful as one would like to believe. In adults especially, it appears occasionally to fail; and this would lead one to suppose that hammer-toe is by no means a condition depending invariably upon the same cause. The hammer-toe of adults may, there is reason to think, be set up by some other cause than that found in adolescence. It is, however, relatively rare, and the best treatment for it appears to be amputation. When excision fails in the adolescent, I believe it will sometimes be found due to too little of the epiphysis having been removed, whereby the condition is left very much the same as it was before the operation. In some other cases also, the disease may possibly be primarily due to an active shortening of the plantar fascia, instead of a passive process.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 29th September, at 8.15 p.m.

Business:—General.

G. T. HANKINS, Hon. Secretary.

CASES TREATED BY MASSAGE.

By T. A. WILSON, M.B., B.S., CRESWICK, VIC.

THE value of massage as an auxiliary aid in the treatment of many diverse conditions was well illustrated by the following cases which have come under my notice during the past year.

Rachel M., *æt.* 25, first came under my treatment in July, 1897, when she was admitted to the Creswick Hospital suffering from a large indolent ulcer on the left leg, just above the ankle. This condition resulted from the kick of a cow accidentally received four years previously, and during the intervening time she had been almost continually under treatment with varying success. On admission, the ulcer measured $3\frac{1}{4} \times 2\frac{1}{4}$ inches, with elevated and indurated edges; the surrounding skin over a large area was of a deep copper colour, and the whole of the tissues on the front of the leg had the feeling of being bound together in a firm deep cicatrix. After rest and tonic treatment, and locally by strapping to lessen the elevation and induration of the edges, I decided to treat the ulcer by skin grafting, adopting Thiersch's method and following the technique advised by Watson-Cheyne. The grafts were taken from thigh of same leg and applied to the ulcerated surface, which had been scraped thoroughly, the skin edges not being spared. Dressings and after treatment carried out in the usual manner, and on the second removal of the dressing, at the end of twelve days, the whole surface was completely and thoroughly healed. Patient was still kept in bed for a month, and then sent away for a change. On her return the scar appeared to be quite sound, and she was allowed to resume her work as a general servant.

The leg continued well up to June, 1898, when the scar broke down and the whole of the graft sloughed out, and she was re-admitted to the hospital for treatment again by skin grafting. Before operating, however, I thought it advisable after the previous failure to try and raise the general tone of the affected part by endeavouring to remove to some extent the organized products of a chronic inflammatory process, and so produce a more healthy bed in which to plant future grafts. For this purpose, the case was handed over to the care of Mr. Hilson for a course of treatment by massage, hoping that the expected improvement in the circulation, in addition to preventing further stasis and migration of leucocytes, would also rapidly remove the corpuscles

and lymph which had already been thrown out, and which to a large extent had become organized into fibrous tissue. The result far exceeded my expectations, for it was soon evident that under massage, applied at first from the thigh down to the upper edge of the copper-coloured area (but not over area involved in the disease), there was a vast improvement in the appearance of the leg, and it appeared as if the stasis and transuded lymph were coaxed out of the area in which there was a desire to linger and induced to journey onwards through the vessels. Head massage was also applied to relieve condition of insomnia, induced by worry over non-success of previous treatment. This, after a few applications, was successful and remained so. The condition of the limb improved in strength and appearance generally, and, as circulatory and lymphatic systems became strengthened, the local portion became influenced, the deep copper-coloured part changing to a lighter colour and the wound gradually attempting self-closing. On account of the hard cicatricial feeling of the parts immediately around the ulcer, I advised some free digital manipulation and deep kneading in this area, after which the renewed vitality of the part was fully assured and finally resulted in the complete healing of the ulcer. As time went on, changes were still seen to occur, the colour becoming much lighter and the scar gradually narrowing to a thin cicatrix. Patient, after a holiday, returned to former situation, the limb having become stronger and more useful. During hot weather at end of January last, she was unfortunate enough to again injure the leg about four inches above site of previous ulcer, and the wound was for some days very much inflamed. She was put to bed at once, and when irritation subdued, some grafts of epidermis were applied to the abraded surface. These speedily "took" and wound soon closed in, and patient can now move about freely and feels the limb daily growing stronger. Notes on this case:—

- (1) The advisability of applying massage to promote a more vigorous circulation, and hence better class of tissues, in areas of chronic ulceration before proceeding to treat by skin grafting. Failure after skin grafting in this case being due to low class of tissue to which grafts applied, seeing that they "took" well and remained healthy for about nine months.
- (2) At first, massage given above the knee, very carefully over the large vessels, and later on gradually approaching the injured part, the object being as an indirect stimulus, and for the relief of local congestion.
- (3) Great influence gained in relieving cerebral congestion by head

massage, which, acting as a sedative, induced sleep. (4) During catamenia staining and congestion round ulcer were more evident, but afterwards rapidly cleared up and improvement generally seemed to advance and be determined to some extent by this factor. (5) Possibility of injury to leg in January being poisoned by dye from stocking, and the possibility of its being worse owing to the influence of catamenia which presents at time of receipt of injury.

Lizzie P., *et.* 18, was admitted to the Creswick Hospital in November, 1897, suffering from hysteria and unilateral chorea, resulting from a fright. The nervous condition was well marked, and at times very distressing. She was kept at rest for some time, and treated with arsenic and iron, and occasional doses of chloral and cannabis indica when clonic movements very severe. The change in her condition for the better being very slow, I decided to place her in Mr. Hilson's hands for treatment. Massage to head, spine and limbs was applied, with the result of increasing the general warmth of the body, producing a feeling of comfort and inducing prolonged sleep. The confidence of the patient was soon gained, and after a few weekly applications of massage and general moral and tonic treatment, there was great improvement in co-ordination with marked lessening of involuntary jerking, and these gradually shading off till only present when startled, and finally ceasing altogether. When last seen, about three months after first application of massage treatment, she was walking about in perfect health, free from chorea, and in marked contrast to the chlorotic state in which she was previous to the application of this line of treatment. Notes on this case:—(1) Quick result gained by attention to sedative effect of cerebral, and bracing effect of spinal massage. (2) Presumptive evidence of massage influencing anæmic or chlorotic states so often found associated with chorea.

MEASUREMENTS OF SCHOOL CHILDREN IN EUROPE.

BY ARTHUR MACDONALD, OF THE UNITED STATES BUREAU OF EDUCATION.

THE purpose of this study is to give in brief the results of investigations upon children in Europe. For more detailed information the reader should consult the original articles.

HUMAN GROWTH IN ENGLISH TOWNS.

According to John Yeats Peckham, of England, there were very few more persons in 1851 living in rural districts in the United Kingdom than there were in 1801. There were on an average in 1851 in city districts 5.2 persons to an acre; in the rural districts,

5.3 acres to a person; in the one, 3,337 persons to the square mile; in the other, 120 only. As the inhabitants of cities become more and more numerous and influential, they must ultimately shape the future of any country. Peckham says that infancy and age, with all their ills, detract, economically speaking, from the effectiveness of life and add to its burdens. Thus, the population was more youthful than it should be by the natural standard. The inference is, therefore, that the youthful element may preponderate whether it be wisely progressive or rashly precipitate. Dr. Lankester, when investigating in the South Kensington Museum, said that healthy men ought to weigh an additional five pounds for every inch in height beyond sixty-one inches, at which height they ought to weigh 120 pounds less one-seventeenth of that gross weight for clothing.

According to Liharzik growth is regular, and all deviation tends to produce disease, as disease also produces deviation. A large head is frequently accompanied with a contracted chest; here mental action may be slow—probably from deficient supply of purified blood. Boys of small frames often have rather large heads and are deficient in repose of character. City-bred children are usually more vivacious, but have less power of endurance (Liharzik) than children reared in the country.

EXAMINATION OF HEIGHTS, WEIGHTS, ETC., OF HUMAN BEINGS IN THE BRITISH EMPIRE.

In the report of the anthropometric committee of the British Association for the Advancement of Science, in 1880, are given the results of observations in over 50,000 individuals. There is a difference of five inches in average statures between the best and worst nurtured classes in the community. There is a constant but more or less uneven growth in height, weight, chest girth, and strength of arm, increasing annually up to 16 or 17, and then rapidly diminishing. Between 11 and 14 the rate of growth in height is almost uniform. At 15 it begins to advance more rapidly, at 16 still more, at 17 it falls off by more than one half, and after this decreases rapidly. The same is true in regard to weight, except that the rate begins a year earlier. The growth of chest girth is uniform up to 13, when it becomes double, and then follows nearly the same course as that of height and weight, except that it continues higher at 17 and 18.

The growth of strength is not so regular. It doubles at 13, making no advance at 14, but making a great advance at 15, continuing longer and diminishing more slowly than height and weight.

COLOUR OF EYES AND HAIR.

Dr. Beddoe, in a limited number of observations (1,027 in all), has found much difference between women of 13 to 23 and women over 25 years of age. In men the greatest change takes place from 20 to 23, while in women it is earlier. Green eyes do not occur with black hair, nor do so-called black eyes with the blackest hair, which often accompanies dark-gray eyes. Dark-blue eyes are rare with reddish hair, but often accompany dark or even black hair. A larger number of observations would probably enable young people to be distinguished from adults through the colour of eyes and hair.

GROWTH OF THE SANE AND INSANE.

Dr. Robert Boyd, of England, from examinations of 2,086 persons in an infirmary and 528 insane, gives among other results the following:—

The body and internal organs arrive at their full size between 20 and 30 years of age. In children especially the body is attenuated by disease. The average weight of males is greatest from 70 to 80 years, which may be explained from the fact that many die at earlier periods from consumption.

The mean weight of the male brain was at all periods above that of the female. Boyd thinks this is the probable cause of the large number of stillborn male infants as compared to females, 51 to 32. The highest average weight of brain in both sexes is from ages 14 to 20 years. The next highest was in the males from 30 to 40, and in the females from 30 to 50 years.

KOTELMANN'S INVESTIGATIONS IN HAMBURG.

In an investigation of the 515 students of the Johanneum, in Hamburg, published in 1878, Kotelmann makes the following statements:—

The students in the gymnasium exceed those in the lower schools in weight and height, more because of unfavourable social conditions of the pupils in these schools. The older the boys the more the muscles of the upper extremities grow as compared with those of the lower, which is explained by the fact that, as they are sitting more, the lower extremities are less active. Thus the muscles of the legs are less contractile as years increase, while the opposite is true with the muscles of the arms. With this is connected the further fact that the strength of the arms increases from year to year with the increase of their circumference, while the strength of the leg, as compared with that of the arm, is less as age increases.

The development of the superficial fascia, which increases with weight of body in the older pupils, is not only greater than in the younger pupils, but increases greatly with the growth of the muscles in the older scholars.

The time of puberty is of the greatest importance for the whole development of the body, since not only the height and weight, but also the muscles and strength of the upper and lower extremities, the chest girth and lung capacity, all at this period increase the most. The only exception is the increase of fat, which is somewhat irregular at different ages.

MEASUREMENTS OF SCHOOL CHILDREN IN GOHLIS-LEIPZIG, SAXONY.

Dr. Paul Haase in 1889 measured 2,806 school children in Gohlis-Leipzig—1,886 boys and 1,420 girls. The average heights and weights at different ages were as follows:—

Age.	Height.		Weight.	
	Boys.	Girls.	Boys.	Girls.
	<i>Cm.</i>	<i>Cm.</i>	<i>Pounds.</i>	<i>Pounds.</i>
6-7 years	110.3	109.3	42.7	40.9
7-8 years	114.4	113.7	46.8	44.7
8-9 years	119.4	117.7	49.3	48.1
9-10 years	123.9	124.0	53.4	52.4
10-11 years	129.1	128.6	57.5	57.0
11-12 years	132.4	133.9	61.9	63.2
12-13 years	138.9	139.5	69.3	70.5
13-14 years	140.7	145.1	71.3	77.3
Over 14 years	146.3	149.1	79.8	86.5

The relation between height and weight should be noted. It is well known that they stand in a constant relation to each other. In comparing these with other measurements, the boys are not so large as those

measured by Kottlmann in Hamburg, or those measured by Bowditch in Boston. The girls are second only to the Boston girls. The children of Gohlis-Leipzig excel in weight and height those in central Russia measured by Erismann, those in Turin measured by Pagliani, those in Poland measured by Landsberger, in Breslau by Carstädt, and in Freiberg by Geissler and Uhligtsch.

Comparing the poor with the well-to-do classes, the results show that for boys of the same age the height varies from 0.7 to 4 centimeters in favor of the well-to-do classes; for girls it varies from 1.7 to 4.1 centimeters in favour of the well-to-do. The children of the well-to-do classes excel also in weight for the same age; for boys the excess runs from 0.3 to 4.7 pounds; for girls from 1.6 to 4.6 pounds. In general the difference between the classes is not so great as in other places, as in Freiberg and Turin, except in Boston, where the difference between the classes is less marked.

Haase also gives data concerning the weak or defective children, who generally cannot attend school regularly. Such children are usually abnormally developed or have some chronic ailment. In the primary schools 9 per cent. belonged to this class. A striking fact is this, that in many cases these children in certain years were over normal; that is, were taller and heavier than other children. This suggests that there is a certain normal relation between mental and physical development, the finding of which is one of the aims of anthropometry.

MEASUREMENTS OF CHILDREN IN LAUSANNE, SWITZERLAND.

In November of each year Dr. Combe measured the children in Lausanne, arranged according to the month in which they were born, giving averages for the month as well as for the year. He found that boys up to 14 and girls up to 11 developed regularly, but from 11 to 14 the girls grew faster. The length of body showed great variations. From the single month's average Combe made the yearly average from 8 to 18. The height of boys corresponding to the years was 117.4, 122.2, 126.9, 131.3, 135.4, 139.8, 144.4, 149, 156, 162, 167; of girls, 116.3, 121.2, 126.1, 131, 136.4, 141.9, 147, 153, 157, 163.

The height of girls up to 11 years is continually less than that of boys; then suddenly it increases and exceeds the boys in the fourteenth year by 1.5 centimeters. Then the growth falls back, and that of the boys is greater and continues so.

TALLEST CHILDREN BORN IN SUMMER.

According to Combe boys born in the months of September, October, November, December, January, and February are not so tall as those born in the other months. Those born in November are the shortest. Those born in July are the tallest.

The investigations of Wahl in Denmark and Wretling in Göttingen, and especially those of Malling-Hansen in Copenhagen, on the deaf, show that the length of body of boys from March till August increases greatly, but very little from September to February. Malling-Hansen assumes that this is due to the summer vacation; but Combe thinks not, because Wahl has observed the same thing in children under 7 years who had not been at school. Combe thinks it is due to the nature of the child, and is analogous to the influence which the birth-period has upon the length of the body, for in both cases the maximum of body-length is found in the same period, that is from March till August.

But it may be due, as it seems to us, to some extent to economic conditions, for a child born in summer

generally has better food and air. As we know, a large number of parents of public-school children are poor; in winter they are forced to economize more on account of expense of heating. They generally live, also, in small and poorly-ventilated rooms. The influence of such conditions on a very young child would be much more detrimental than when the child is older and better able to resist unfavourable surroundings.

SICKNESS IN SCHOOL.

Combe found sickness in girls existing to some extent to the eleventh year, then it increased faster than in boys up to 15. In the case of girls, sickness depended less on contagious diseases; it was due rather to the want of resistance, etc.

It will be noted that the girls attend school at the age when they are most disposed to sickness, as anæmia, headache, etc.; while the boys, if they enter into this dangerous period, have left the primary schools. Combe criticises especially any school plan which does not consider this difference between the sexes as contrary to nature, for it makes at this time the same requirements of boys and girls. The girls demand special care during the age of puberty; their tendency to anæmia during this period, according to all rules of hygiene, should be combated every way, at home, in regard to air, light, exercise, and nutrition, and especially in school where sufficient air-space, good ventilation, light, and heating are demanded. Girls at this period should not have much housework to do, for it robs them of necessary exercise in the open air.

Children of the well-to-do classes are stronger and larger when beginning school life, but in spite of their better nourishment do not grow faster than the poorer children. This is not in accord with the conclusion as to Washington school children, but Landsberger measured only 106 children. This points to the great importance of nourishment in the earliest childhood, before school life begins.

INFLUENCE OF UNFAVOURABLE CONDITIONS ON THE GROWTH OF CHILDREN.

Influence of unfavorable conditions on the life and physical development of youth is shown by Pagliani.

The poor are less in height and weight than the wealthy classes. There is a striking offset in the difference in trades on the strength of lift, e.g., the smiths are much stronger than the tailors.

CHEST GIRTH IN RELATION TO LENGTH OF BODY.

As the development of the body may be expressed in its length, so chest girth can be considered as an expression for the width of the body.

Weissenberg says the growth in height does not go parallel with that of the chest. It seems that during puberty the body grows in length at the cost of the chest development. But this unfavourable condition is compensated for after puberty. Since the chest contains the most important organs to life, and since the body during puberty should have the best of care, conditions that affect unfavourably the relation of length of body and chest girth must be avoided. Weissenberg says that from facts already known school life exercises a bad influence in this respect on the development of the body. According to Sack, good food and pure air play the principal rôle. The chest girth increases in relation to the length of body up to about the age of 50. The weight also reaches its maximum about this time. It is a general observation (Weissenberg) that very thin people can become very fleshy in old age, and that marriage has a good influence in this relation. The increase in flesh

is specially in the trunk, chest, and abdomen, and thus the chest girth increases. There is also the emphysematous enlargement of the lungs, which is almost normal in old age. This also increases the chest girth.

INFLUENCE OF AGE ON GROWTH OF BODY.

The position of the extremities is parallel to the length of the body and corresponds in growth. The length of the extremities is about one-half the length of the body. Examining a table of Weissenberg, it will be seen that, like the whole body, the extremities grow rapidly up to the sixteenth year. Then there is a slow growth to the thirtieth year, when the maximum is reached; then follows a slight retrogression. The increase of the leg in length is in general up to the tenth year less than half of the increase of the length of the body; but in the following year the leg grows faster than the half of the increase of the body in length. This continues up to the seventeenth year. Directly before puberty leg and trunk grow about equally. The increased growth of the whole body during puberty is due especially to the increase in length of leg.

In advanced age the leg shortens somewhat in length, due to the flattening of the instep, weakness in the kneejoints, and sinking of the neck in the femur.

The greatest yearly increase in the length of the foot is in the sixth year, which is striking. In old age foot and hand decrease. This, as in the extremities in general, is probably due to arthritic changes in the joints. Thus in the general shrinking of old age all members of the body take part.

PERIODS OF GROWTH.

Comparing the results of Weissenberg and others, there are six periods of growth. The first period extends from birth to the sixth or eighth year, and is throughout one of very rapid growth. At the end of this period the body is more than twice as large as it was at birth. It seems that the impulses received during the foetal life mature a number of years after birth. These impulses are of great intensity, as shown from the facts that the foetus at the end of the foetal life is twenty-five hundred times larger than the ovum out of which it has developed.

The second period extends from 11 to 14 years of age and growth is slow.

The third period is from 16 to 17, presenting a sudden advance in growth, which is in relation with the development of puberty.

The fourth period shows a slow growth, extending up to age 30 for length of body; up to age 50 for chest girth. Here growth in the proper sense has ceased.

The fifth period is one of rest, and in normal conditions is from 80 to 90 years of age, and is one of full symmetrical development.

The sixth and last period is characterised by a decrease in all dimensions of the body.

It must be remembered that these periods do not always fall at the same age.

GROWTH OF HEAD, FACE, AND NOSE.

The development of the head of children has been studied but very little.

The circumference of head of the new-born child is over 60 per cent. of its full length of body when grown. At birth the circumference of head is about three-fourths of the height of the body; when the child is grown it has fallen to only one-third of the height of the body.

As to the shape of the head, it is rounder in childhood, but gradually becomes longer as indicated by the cephalic index. As before indicated, the maximum length grows faster than the maximum width.

The relatively small increase of head as compared with body may be due to the fact that from the day of birth the child needs its brain and senses as much as when it is grown.

LONG HEAD AND BROAD HEAD.

About all European peoples show two different forms of head, a long and a small and a short and broad head. Formerly in Germany the long head prevailed, being called the Germanic type, but in recent times short, broad heads have increased, till now they constitute the largest number.

RELATION OF COLOUR OF SKIN, HAIR, AND EYES.

The colour of the skin, which stands in a certain relation with colour of hair and eyes, is an important characteristic for distinguishing races, but in Germany, as in other European countries, there is no uniform relation. Blonde and brown people follow one another in most places, and to-day only a few peoples are wholly blonde. It seems as if brunettes were increasing daily. According to Virchow, if it could be shown that the long-headed people were blonde and light coloured, and the short-headed brunettes and dark colored, the course of the mixture and the spread of different peoples (also in prehistoric times) would present valuable information.

There is in typical individuals of a race a more or less constant relation between the colors of the skin, hair, and eyes. Frequently all are dark, often they are all light.

Virchow assumes that since there was never a dark race with light hair, although originally blonde hair can become in adult age dark, that those persons who between the ages of 6 and 14 have blonde hair should be considered as belonging to a blonde race. There is no race of which the skin, hair, or iris is wholly without pigment. Albinism is a pathological condition. No definite lines can be drawn dividing blondes from brunettes. Every individual has a tendency to darker shade.

The majority of children are born with blue eyes, but with very many the blue soon changes into a brown. This change begins in the first week in life; after two years the permanent colour is in most cases determined.

The change of color in the hair is much slower. The majority of children have blond hair at birth. It becomes dark gradually, sometimes not till after puberty. The same is generally true of the skin, only the darkening process extends further into later life. In white races elderly people always have a more colored skin than young people; the difference is more of quantity than quality.

Since there is a certain parallelism in the color of skin, hair, and eyes, persons with blue eyes, blond hair and white skin are called "blondes," those with brown eyes, brown hair, and brown skin "brunettes." But there is a large number of combinations of less significance. The white races especially show great individual variability in combinations. In making these divisions individuals are generally taken between the ages of 20 and 25.

The general results of the investigation in the schools of Germany are confirmed by similar studies in Austria, Belgium, and Switzerland. The number of children is so great (over 10,000,000) that these results must be considered as fairly well established.

PROCEEDINGS OF BRANCHES.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE Monthly Meeting was held at 8 p.m. on Thursday, August 31st, 1899, in the University. The President (Dr. Marten) was in the chair. Present: Drs. Brummitt (Vice-president), Corbin, Swift, A. A. Hamilton, C. W. Hamilton, J. A. G. Hamilton, T. K. Hamilton, Watson, Good, Dunn, Morgan, Cavenagh-Mainwaring, H. H. Wigg, Lendon, H. Evans, Symons, Cleland, Todd, J. Evans, Gregerson, Gault, W. A. Verco, Michie, W. T. Hayward, and the Hon. Secretary (Dr. J. B. Gunson).

The minutes of last meeting were read and confirmed.

LIVING EXHIBITS.

Dr. T. K. HAMILTON exhibited the following cases:—

I. Removal of the Lens in High Myopia.—R. G., female, aged 12 years. Always has been short-sighted, and has developed a concomitant convergent strabismus of the left eye. On April 15th, 1892, retinoscopy gave in right eye, $-13.00D$; and in left, $-12.00D$. The strabismus in this latter on October 5th, 1893, was $2^{\circ}50'$. The myopia had increased very markedly, and most so in the squinting eye. Her refraction then was:—By retinoscopy—

Right, $-22.00D \subset -4.00D$ ax. 150°

Left, $-24.00D \subset -6.00D$ ax. 180°

and Right, $\frac{5}{8} -16.00D \subset -4.00D$ $\frac{5}{8}$
Left, $\frac{5}{8} -20.00D \subset -5.00D$ $\frac{5}{8}$ (barely).

There was an annular staphyloma of each disc, but the media were clear and fundi otherwise normal. For the cure of the squint an advancement of the external, with tenotomy of the internal rectus was performed, and 2° of the strabismus thereby removed.

On May 20th of this year the vision of the left eye had slightly improved, as she could with the correcting lenses see $\frac{5}{8}$ clearly, and could read J.10 at 10 c.m. The lens of this eye was then needled and allowed to be absorbed without any further interference.

August 31st. Her present condition is as follows:—Axes of eyes very nearly parallel, a slight convergence only, and that equally distributed between the two eyes. Left eye: Pupil nearly round, slightly oval up and inwards, but it moves perfectly; small remains only of capsule near periphery, centre of pupil and rest of media quite clear, fundus as before. Vision:— $\frac{5}{8}$ and J.4 at 20 c.m. The child has improved also very markedly in appearance, has less of a dreamy look in her face, and takes an interest in things now that she did not seem to see or notice previous to the operations.

II. Xerophthalmia due to Old Trachoma, and Operation for its relief.—H. D., Irish, female, aged 21. Has had granular ophthalmia since quite a child, and lately has developed xerosis of the conjunctiva and cornea of the right eye. The xerosed surface became scaly, with apparently much epithelial proliferation, considerable hyperæmia of the surrounding parts and great photophobia with sympathetic irritation of the other eye. No treatment seemed to cause any improvement of the condition until the operation recommended by Roudine (Russia)* was performed. This operation consists in

suturing the free borders of the lids together, except in the medial part, and thus by diminishing the extent of the uncovered dry surface allows of the secretions from the surface and glands of the conjunctiva keeping the cornea more moist. The result has been as in previous cases I have similarly treated—most satisfactory. The cornea and conjunctiva are now quite normal as far as moisture goes. There is no photophobia or lachrymation, and the vision of the affected eye is $\frac{2}{5}$. This visual acuity is as much as could be expected, as the cornea is leucomatous. The patient can now return to work as a domestic servant, whilst before the operation she was quite unable to do anything.

The good results following this operative procedure point to the correctness of the view, now generally accepted by most authorities, namely, that Neisser's bacillus is not the special exciting cause of xerosis, but that the disease is rather due—as Fuchs has pointed out—to a fatty degeneration of epithelium of the cornea. In consequence of this degeneration the lachrymal fluid does not adhere to the affected surface, but runs off it, and hence the dessication of the parts. The extra protection and increased retention of the tears which the narrowing of the palpebral fissure ensures, combats this drying-up process, and by effectively removing the cause, at the same time relieves the effects.

III. Piece of Steel in the Lens Removed with the Electro-magnet.

*IV. Frontal Sinus Empyema in which Golorine's Operation was performed, and Dr. Kenny's (Melbourne) Circular Bone-cutler used.**

V. and VI. Two cases of Cicatricial Contraction at the Orbit operated on by Skin Transplantations.

(a) J. B., male, aged 52. Got kick from a horse fifteen years ago, which destroyed R. eye and lacerated the lower lid. The wearing of a broken artificial eye for ten weeks previous to his coming under treatment caused cicatricial contraction of the orbit, and no prosthesis could be made to stay in. Ogston's operation† was performed first, but it was a failure. Then the transplantation of a piece of skin from the forearm to make a new fornix (lower) was undertaken. This had to be repeated a second time to secure the necessary effect. The great difficulty in the case was due to displacement of the lower lid caused by a cicatrix resulting from the original injury. A leaden prosthesis was introduced after the operation, and two holes made in its anterior surface to allow of syringing out the sac without removing the shell. This perforation was found to be a convenience as well as an advantage in promoting the healing process.

(b) A. B., female, aged 16. Lost her eye when two years old, and has never been able to wear an artificial eye properly. The sac was so small that no eye of any size could be inserted. Now, after the transplantation operation, she is wearing an eye almost as large as its fellow, and the cosmetic result is very good.

VII. and VIII. Two Cases of Deviation of the Septum Nasi, and Operation for their Relief.

(a) E. A., male, aged 23. Marked deviation of septum to left side, and almost complete occlusion of this nostril. Asch's operation‡ done, and Nosophen gauze plugs first, and afterwards Lake's indiarubber splint used. (Asch's cutting scissors exhibited.)

* A. M. Gazette, January, 1892.

† B. M. Journal, December, 1894.

‡ "Laryngoscope," vol. vi., p. 349.

(b) F. G., male, aged 16. Very marked deviation of septum to right side, causing nearly complete occlusion of the nostril. Watson's operation* done. Adam's forceps used to straighten the septum and Nosophen gauze plugs afterwards.

The result in each case is very satisfactory.

Dr. LENDON showed the following cases after operations: (1) Abdominal hydatid, removed by incision which avoided division of muscle-fibres in parietes. (2) Necrosis of os calcis. (3) Renal calculus, with the calculi.

Dr. SWIFT showed a case of persistent sinus in groin (after ac. epiphysitis of femur) cured by packing with gauze.

PATHOLOGICAL SPECIMENS.

Professor WATSON showed:—

1. Piece of perished elastic tube coated with a mortar-like deposit (phosphatic), passed by a boy *æt.* 12, whose right ureter had been transplanted into the sigmoid flexure three weeks previously. He suffered from ectopia vesicæ. It was thought at first that the end of the ureter had sloughed away. There is no evidence to show how the tube got into his bowel, unless he swallowed it. (Dr. Lendon.)

2. Labyrinthic interadhesions of 6 feet of ileum from an old man who died of liver abscess. There were marked signs of bygone appendicitis, but none of herniæ. The mass looks like an immense glomerulus. (Dr. Hamilton.)

3. Staghorn calculus removed from renal pelvis with two pisiform satellites from polar calyces from a youth, *æt.* 18, who enjoyed medical treatment for eight years, without hæmaturia or pyuria. Kidney delivered and split down the back. Catheter passed into bladder without obstruction. Tendon suture reposition. (Dr. Lendon.)

4. Rapidly-growing cocoanut-sized myo-fibroma from a nullipara, *æt.* 37, who suffered from frightful metrorrhagia. The uterus being easily delivered and pear-shaped, it only required a few minutes to remove. (Dr. Hamilton.)

5. Breast with duct cancer from a ten para, *æt.* 37. The axillary glands were not enlarged, but they were removed. (Dr. Hamilton.)

6. Acinous form of cancer from six para, *æt.* 52. The supraclavicular fossa was cleared out, as also the axilla, all in one piece. Breast was left till the last, in order to keep patient warm. (Dr. Hamilton.)

7. Cricket ball hydatid with leathery walls removed from right side of omentum of a man, *æt.* 32, who diagnosed his own case, and is here this evening, thirty days after the operation by a triple layer high appendix operation. (Dr. Lendon.)

8. Pelvic viscera of a girl, *æt.* 12, who was burned to death. Demonstration of the coecal folds and blood supply of the appendix and uterus. (Professor Watson.)

9. Horse-shoe kidney from a man, *æt.* 37, who died of septic pneumonia, ensuing on periostitis of jaw. (Mr. Chenery, Port Augusta.)

On the motion of Dr. HAYWARD, seconded by Dr. CLELAND, it was resolved to send a letter of condolence to Mrs. Whittell on the death of Dr. Whittell (President of the Central Board of Health, &c.).

The paper read by Dr. J. A. G. Hamilton at the last meeting was discussed by Drs. Swift, Gregerson, Hayward, Michie, J. Evans, Morgan, and the President.

Dr. J. A. G. HAMILTON replied at length.

Professor WATSON then read his paper (the first of a series), "Remarks on Some Abdominal Operations." (See page 365.)

To be discussed at next meeting.

Dr. H. H. WIGG read a short paper on "Case of Multiple Birth." (To appear in a future issue.)

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary Monthly Meeting of the Branch was held in the Rooms, Collins-street, on Wednesday, August 16th, at 8 p.m. Present: The President (Mr. A. L. Kenny), in the chair, and Drs. McAdam, Springthorpe, Kent-Hughes, O'Hara, Nyulasy, Bennie, Cuscaden, Sutherland, and Finlay.

The minutes of the previous meeting were read and confirmed.

The HON. SECRETARY reported that the Council had made the following addition to the rules:—

"The system of acting as medical officers to institutions managed and carried on by laymen for their own profit and the touting or canvassing for patients, either directly or indirectly, to join medical aid associations or similar institutions, are contrary to the ethics and inimical to the best interests of the profession, and any member so offending shall be deemed guilty of unprofessional conduct, and shall be dealt with in accordance with the rules of the Society, and no medical man so transgressing shall be met in consultation by any member of this Society."

The PRESIDENT pointed out that if not repealed or amended within three months the new rule became effective.

A discussion then ensued as to the accommodation and rooms in which the Branch had been meeting during the past few months. It was generally agreed that the series of changes which had unfortunately occurred of late had had a detrimental effect upon the attendance at meetings, and that the present accommodation was unsatisfactory. All the members present joined in the discussion, and it was ultimately resolved that the Council be empowered to take the necessary steps to procure more suitable accommodation.

Mr. O'HARA then read his paper on "Some Original Surgical Work." (To appear in a future issue.)

Drs. Cuscaden, Nyulasy, Finlay, Sutherland, and Kent-Hughes congratulated Mr. O'Hara upon his suggestions and results, and Mr. O'Hara replied suitably.

Dr. FISHBOURNE then read "Some Notes on the Victorian Lunacy Act." (To appear in a future issue.)

Upon the motion of Dr. SPRINGTHORPE, seconded by Dr. McADAM, it was resolved that a deputation, consisting of the President, the Hon. Secretary, Drs. Fishbourne and Springthorpe, wait upon the Chief Secretary, and bring under his notice the defects in the Act and its administration referred to in Dr. Fishbourne's paper. The meeting then adjourned.

TRAINED MALE NURSE seeks engagement in mental or ordinary medical cases. Has had considerable experience in mental nursing, and is accustomed to travelling with patients to Europe and in the Australasian colonies. Unexceptional testimonials. References kindly permitted to Drs. F. N. Manning, Jarvie Hood, W. E. Warren, T. S. Dixon.

Address: B. T. O'NEILL,
5 Elizabeth Place,
Paddington

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE regular monthly meeting of the Branch was held at the Royal Society's room, on Friday, 25th August, 1899. Present:—Dr. E. T. Thring (President, in the chair), Drs. Tidswell, Knaggs, Gordon MacLeod, Flynn, Pockley, Spencer, R. Steer Bowker, Gordon Craig, J. B. Nash, Arthur, Crago, McDonagh, Charles MacLaurin, G. Armstrong, Binney, Littlejohn, Barrington, Gledden, Hankins, Sawkins, West, McMurray, Mills, Megginson, Hinder, Worrall, Quaise, Macdonald Gill, Jobister, Morgan Martin, G. L. Lawson, Maitland, S. H. Hughes, Kirkland, Sinclair Gillies, H. Browne.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the nomination of the following gentlemen:—Dr. J. C. Halliday, Dr. A. Neale.

The PRESIDENT stated that a special general meeting of the Branch would be held on Friday, 1st September, when Dr. Eames would read a paper on quarantine.

Dr. B. STEER BOWKER read a paper on a case of cancer of the colon—removal by Paul's method—the patient was exhibited. (See page 388.)

Dr. MAITLAND said Dr. Bowker was to be congratulated on the successful result of the operation. He had described the operation as specially adapted for those cases (1st) where obstruction existed with paralysis of the gut, and (2nd) when the general condition was bad. He (Dr. Maitland) had a case under his own care at the Sydney Hospital where he removed a triangular piece of the descending colon. The man had fallen from a scaffold on to a pair of carpenters' snipe perforating the abdomen, and causing a lacerated wound of the descending colon. The peritoneal cavity was washed out with weak boracic lotion, the portion of the colon involving about two-thirds of its circumference, was removed and the cut surfaces united by Lembert's sutures. A plug of omentum was fixed over the seam. The patient made an uneventful recovery.

The PRESIDENT (Dr. Thring) in commenting on Dr. Bowker's paper congratulated that gentleman on the successful issue of the operation. Bearing in mind that twelve months had elapsed since the operation, there was ground for the hope there might be no recurrence of the disease, though the patient could scarcely be deemed absolutely safe yet.

It was fortunate that the growth had been found so freely movable. It was a curious fact that growths presenting features of malignancy had been known unaccountably to disappear of themselves. A case of the kind had come under his notice where the growth was so firmly adherent that operation was out of the question. After the elapse of three or four years, however, the patient, a boy, was seen again when he presented the appearance of complete recovery, all signs of the disease having disappeared.

Dr. WORRALL said: The case presented several features of more than usual interest. The patient came to the out-patient department of the Sydney Hospital, complaining of pains in the abdomen, which had troubled her at intervals for about two years. He made out pregnancy of about ten weeks, complicated by a tumour in Douglas' Pouch which was very low down, moderately tender, and gave the uneven semi-solid feel of a dermoid cyst. Recognising what a serious cause of dystocia this would be in delivery at full term, Dr. Worrall admitted her to the Hospital and did abdominal section; finding that the tumour was intestinal and

not ovarian, he thought it better to close the abdomen and empty the uterus before attempting the removal of the growth. The case not being gynaecological was transferred to the surgical wards in accordance with the rules of the Hospital, and thus came under the care of Dr. Bowker.

They all knew what a wide range of mobility belonged to the transverse colon and the sigmoid flexure, but the cecum and ascending colon were characterised by the very opposite; their degree of mobility was very small indeed.

It was the more surprising therefore, to find that a tumour, which was low down in the true pelvis, proved to be a growth of the cecum and ascending colon. Dr. Worrall agreed that the best method of operating upon these growths of the large intestine was that in three stages described by the late Greig Smith.

The chief factor which made for success, apart from the skill with which the operation was performed, was the early period at which the patient came under observation. The general condition was good, and there was no intestinal obstruction.

Since meeting with this case, he had come across another very similar. A woman presented herself with a fairly clear history of ruptured ectopic gestation, that is, having missed a monthly period, she had been seized twelve days before seeing her with sudden agonising pain with vomiting. On examination, there was a uterine pregnancy of about one month, complicated by a tumour, size of moderately-sized orange, in the right false pelvis. Thinking this was a cyst which had undergone axial rotation of the pedicle, Dr. Worrall operated, and found a growth of the cecum apparently malignant, absolutely fixed. Removal being out of the question, the wound was closed. Later on he emptied the uterus. Four months afterwards, the patient again presented herself; she had gained flesh, said she felt well, and on examination, the growth was found to have markedly diminished in size. Many similar instances are on record of the modifying influence of merely opening the abdomen, upon apparently malignant growths.

He heartily congratulated Dr. Bowker upon his successful result.

Dr. POCKLEY read a paper on the notification of ophthalmia neonatorum (see page 371), and moved the following resolution:—"That considering the serious results in the community of neglected cases of ophthalmia neonatorum, both from commercial and humanitarian points of view, the New South Wales Branch of the British Medical Association recommend that ophthalmia neonatorum be included in the list of compulsorily notifiable diseases."

The PRESIDENT hoped the meeting would give a strong expression of opinion on this most important point. He would invite Dr. Pockley to formulate a concise resolution on the question to be submitted to the meeting.

Dr. S. H. HUGHES disagreed with the motion of Dr. Pockley. Ophthalmia neonatorum was not, he contended, an infectious disease. It might be as well argued that gonorrhoea should be a notifiable disease. He could see no good were the resolution agreed to. Rather the Board of Health should be urged to pass an adequate Medical Bill.

Dr. CHARLES MACLAURIN, also, was not in sympathy with Dr. Pockley in the matter, neither could he regard the disease as a highly infectious one, to be classed with such as diphtheria, scarlet fever, and typhoid. Nevertheless, it might be as well were the Board of Health influenced to curtail the ravages of the disease as far as possible.

Dr. TIDSWELL believed there would be grave objections raised to the proposal were it referred to the Board of Health. Notification, after all, was but a means to an end. Experience had proved that householders were extremely negligent respecting the notification of diseases.

Dr. SAWKINS recognised the importance of the matter under discussion. The out-patient department of the large hospitals exhibited proofs of this in a lamentable degree. The Board of Health could only administer the law as it found it, therefore the matter should be strongly represented to the department with the view to obtaining an Act of Parliament dealing with the question in a satisfactory manner.

Dr. WEST was quite in sympathy with the proposed movement. It was high time some steps in the direction indicated should be taken, so that children suffering from ophthalmia neonatorum might be compelled to go to a hospital where they would receive the necessary constant and skilful treatment the disorder demanded, and this without the delay, which was of such paramount importance.

The PRESIDENT observed that the discussion appeared to him to be drifting wide of the point at issue. It was required to initiate means whereby children should receive prompt medical attention at an early stage of the disease so that the crying evil, blindness for life, which occurred in so many cases, might be prevented. For this purpose the Board of Health should be impressed with the urgency of the matter; this done, the Board could well be left to arrange the details.

Dr. GORDON MACLEOD, in seconding the motion, said that there would probably be technical difficulties in giving effect to the request contained in the motion as it stood. One had, however, only to see the cases that were brought for treatment after one eye or both eyes had been irretrievably ruined to realise the importance of some steps being taken, and the motion would serve to bring the matter forward. The object of registration here differed from that of infectious diseases at present notifiable on one essential point. It was less for the protection of the community at large, and more for the protection of the patient's future from the ignorance or carelessness of those responsible for it. Though there was no general legislation in England on the matter, some municipalities had local regulations which appeared to answer satisfactorily.

Mr. HANKINS asked who was to notify the disease. If a medical man were in attendance he would no doubt recognise it and treat it promptly, which is all that is needed. If no doctor were in charge the diagnosis would not be made, and the disease could not be notified. Would it not be better to suggest to the authorities that the symptoms of the disease, its dangers, and the necessity for early treatment, should be proclaimed in the same way as is done in the case of snakebite.

Dr. CRAIG said he for one could not quite see where the good of mere notification would come in. One important thing was to train their midwifery nurses to recognise the complaint. Some provision for immediate treatment was needed, but the removal of infants a few days old to a hospital would frequently result in the death of the infant, although the eyes might be cured.

Dr. QUARFIE believed that it would be difficult to get the State to act in this direction. It might be taken as a fact that the community was in ignorance as to the great evil existing in their midst; therefore, it was plainly the duty of the medical profession to lose no time in directing general attention to it. If the

case were represented to the authorities in the grave aspect the question demanded, and that by an intelligent class such as the profession represented, the whole question might be gone into promptly, and the suggestions received with due respect. Leprosy was recognised by the State as a menace to the public, and surely the question whether children became blind for life through the culpable ignorance of parents or midwives, should be one worthy the attention of the legislature.

Dr. KIRKLAND regarded the disease to be comparatively rare. In his practice in the suburbs he had only met with two cases. Dr. Pockley and some other speakers had doubtless been impressed with the apparent prevalence of the disorder through attendance at hospitals. He failed to recognise the urgency of the matter discussed in the degree that many previous speakers did.

Dr. POCKLEY, in reply to the criticisms on his motion, begged entirely to disagree with Dr. Hughes as to ophthalmia neonatorum not being contagious. He had known two children to contract the malady from an infant in the same house. Ophthalmia neonatorum was regarded by the best authorities as highly contagious, and this was sufficiently proved by the strict measures taken in other countries to deal with a matter of such importance to the public. From statistics he had given it was shown that the cost to the United States of America Government from this disease amounted to one million and a-half per annum. The anatomy of the child's eye differed from that of an adult; in the former the cornea was much softer, and therefore more susceptible to the disease. It had been said by Dr. Tidswell that householders were apathetic in the matter of notifying cases of infectious diseases occurring in their homes, but this surely only tended to emphasise the necessity of obtaining adequate powers to compel them to attend to such duties. Germany, America, and even slow-going old England, all took some precautions in this direction. In England it had been the custom in certain districts to have warning as to the gravity of cases of children suffering from inflammation of the eyes printed on the vaccination forms. The testimony of Dr. Sawkins was valuable, as his experience had been gained at a large hospital, at the same time he (the speaker) desired Dr. Kirkland to understand that his knowledge as to the extent and growth of this disorder had not been derived solely from hospital practice.

Dr. POCKLEY, with the consent of the seconder, now made an addition to his original resolution, which he thought would meet the views of all. It would now run as follows:—

"That, considering the serious results to the community of neglected cases of ophthalmia neonatorum, both from a commercial and humanitarian point of view, the New South Wales Branch of the British Medical Association recommend that ophthalmia neonatorum be included in the list of compulsorily notifiable diseases, or if this be considered impracticable that the Board of Health should take whatever steps they may consider desirable to deal effectively with the disease."

The PRESIDENT (Dr. Thring) then put the resolution to the meeting, which was carried unanimously.

Dr. FRANK TIDSWELL exhibited some micro-photographs of sections of leprosy tissue.

Dr. MILLS exhibited a preparation of aneurism of the internal carotid communicating with the cavernous sinus.

A SPECIAL GENERAL MEETING

Of the Branch was held at the Royal Society's room on Friday, September 1st, 1899, at 8.15 o'clock, Dr. E. T. Thring (President) in the chair. There were also present:—Drs. Clarence Read, Knaggs, L'Estrange Eames, Nickson, Todd, Hankins, Ludowici, W. G. Armstrong, Sinclair Gillies, Manning, Tidswell, West, R. H. Jones, Kendall, Cosh, Beattie, Crago, Coutie, Abbott, Gladden, J. A. Dick, and Sawkins.

THE PRESIDENT announced the nomination of Dr. Lawes, of Cobar.

Dr. L'ESTRANGE EAMES read a paper on "Reform in Quarantine" (see page 380), and moved the following resolution,—“That a committee consisting of the President, Vice-president, Treasurer, Secretary, and the mover, with power to add to their number, be appointed to act in conjunction with a committee of the Chamber of Commerce, Newcastle, to suggest reforms in quarantine.”

Dr. BEATTIE seconded the resolution *pro forma*, and said he had not come prepared with any observations on the subject under review. Dr. Eames' paper was an excellent one, but he (Dr. Beattie) did not agree with all the points in it. At this juncture of national life, when federation was all but accomplished, it seemed a very opportune time to take steps with regard to the laws relating to quarantine as it existed in the Australasian colonies. To push Dr. Eames' ideas to their logical conclusion would be to abolish the quarantine system altogether. He (Dr. Beattie) thought it necessary to have quarantine stations at both of the first two Australian ports of call. There could be no question that if there had been an efficient quarantine system at Fiji the epidemic of measles, which on a well-known occasion was introduced by the infected sailors, and which almost depleted the islands of population, would not have occurred. Of course, the quarantine regulations may require amendment, but he did not think quarantine should be abolished; all the unnecessary restrictions which now obtain would not be tolerated. He would like to bear testimony to work done by the late Dr. Haynes Gibbs Alleyne as one of the first Health Officers of the Port of Sydney, than whom a more painstaking, conscientious, and efficient officer never served a Government. He (Dr. Beattie) had charge of North Head in 1881, and he could assure the members that some of the details in connection with the work at North Head at this period were ridiculous. He thought, therefore, that the Australian colonies were not ripe for the abolition of quarantine, but that the establishment of stations at the first ports of call would materially decrease the inconvenience, needless expense, and worry which are now complained of, as also to remove the somewhat well-grounded suspicion that obtains as to the false security of quarantine as it at present exists.

THE PRESIDENT hoped the meeting would give a full expression of its opinion on this important subject.

Dr. NICKSON considered that the mere fact that quarantine existed created a false sense of security to the public, and this tended to make people apathetic as regards inland sanitary matters, and further militated against vaccination being made compulsory in the colony, and generally the system of quarantine lulled the community into a state of security. Medical men as a rule did not greatly concern themselves on questions relating to commerce, believing, no doubt, that commerce could safeguard its own interests, but as had been made evident the trade of a country was made or marred by the laws regulating the imports at the ports. He rather had faith in the enforcement of strict sanitary laws and increasing the powers of

medical officers of health, and careful attention to the isolation of the infected sick.

Dr. CLARENCE READ had had the opportunity of seeing cases of smallpox on board ship. The vessel had just left Shanghai when the patient presented himself with the spots just coming out. On examining the rest of the crew he discovered a man with a very few spots on the trunk and with none on the face. This patient had experienced no ill effects apparently, as he had carried on his duty as a stoker uncomplainingly. Considering that Colombo, where smallpox was endemic, a port only a few days' sail of Australia, the danger of infected persons escaping detection of the quarantine officials was very great. When once vaccination was thoroughly instituted in this country he believed quarantine regulations might be greatly modified.

Dr. TODD entirely disagreed with Dr. Eames on the advisability of endeavouring to abolish quarantine in Australia. The main object of Dr. Eames' paper was to draw attention to certain disabilities which the existing quarantine regulations forced upon the shipping community of Newcastle, in reference to sending ballast out to sea. Dr. Eames' arguments in favour of allowing ballast, loaded at ports where infectious disease was endemic or epidemic, to be dumped in the neighbourhood of Newcastle were by no means convincing. It appeared to him Dr. Eames wanted a committee to be appointed to endorse the claims of the Newcastle Chamber of Commerce; if so, the motion should be more definite, and should state the names of the proposed committee, and the fact, if it was a fact, that it was to act with committees of the Chambers of Commerce and make representations to the Government or the Board of Health. But the committee could not act with the Chambers except by their invitation. He did not intend to move an amendment.

Dr. WEST recognised the danger of ships coming to ports in Australia where the community practically was an unvaccinated one. He believed the persons chiefly interested in the question of the enforced discharge of ballast were the residents of Newcastle, and they might be allowed to fight their own battles, supported by the Chamber of Commerce and the Public Health officer of the locality. A case of smallpox had come under his observation as far back as 1881. The patient being a recent arrival, he had communicated promptly with the Medical Officer of Health (the late Sir Alfred Roberts), and had narrowly escaped quarantine himself in connection with the matter.

Dr. DICK said he had had a conversation with a member of the Sydney Chamber of Commerce, who had informed him that the ballast objected to by the Board of Health was contaminated with sewage matter, and that the Sydney Chamber was satisfied to leave the question in the hands of the Health Board. If shipmasters sent ships with such ballast they must certainly take the risk, as they must know the regulations.

Dr. COUTIE said the committee should be larger, and the men who were conversant with the subject should be placed upon it. The committee should meet and come to some decision before approaching the Chamber of Commerce.

Mr. HANKINS said he understood that the Board of Health had this matter under consideration at the present time, would it not, therefore, be well to allow the business to be dealt with by that body without interference.

Dr. EAMES amended the resolution.

Dr. MANNING regarded the proposal of Dr. Eames to appoint a committee for the purpose stated to be quite unnecessary. A little more information on the

subject would show that the Board of Health was doing all that was needful. He was not there to defend the Board, which was quite able to take care of itself, but as an individual member of it he was prepared to join issue with Dr. Eames upon almost every point he had raised. It was absolutely necessary that the ballast arriving from certain ports should be inspected. This consisted of gravel, sand, rubbish, or filthy matter, as the case might be, and where materials for ballast had been taken from the foreshore of a port infected with yellow fever, or was the sweepings of a filthy Eastern town, it was rightly condemned to be sent to be sunk at sea. It must be borne in mind that the mariner was a wily, imaginative, and inventive person, and spent a good deal of the spare time which came to him in fair weather inventing devices for the circumvention of quarantine officials, so that it was necessary that he should be bound by hard and fast rules which should be enforced. The water on board, when it came from a country where cholera was rife, was also rightly pumped out before the vessel obtained pratique. Dr. Eames advocated the entire abolition of the quarantine restrictions, and his arguments with regard to smallpox ran something like this: Abolish quarantine, then people will get smallpox, and when they have got smallpox they will be scared into compulsory vaccination. I do not think this Association is prepared to go as far as this. The regulations were not too stringent for the purpose for which they were framed. The present rules are as follows:—

1. The Port Health Officer will inspect ballast to ascertain its state, and will exercise discretion in dealing with it under the subjoined rules.
2. All foul or offensive ballast, whencesoever arriving, must be discharged at sea.
3. All clean stone ballast, whencesoever arriving, may be disposed of at the master's discretion, subject to port regulations.
4. Clean sand, earth or loam ballast arriving from ports not indicated in the next preceding paragraph may be used in harbour works, or discharged at the ballast jetty.
5. Sand, earth or loam ballast taken at ports or places which are (a) malarious, (b) have been the seats of epidemics of yellow fever, (c) are the permanent seat of cholera, or (d) were the seat of cholera, yellow fever or plague at the date such ballast was taken, must be discharged at sea.

Dr. EAMES, in reply, thanked Dr. Beattie for seconding the resolution. With reference to what Dr. Manning had said as to all suspicious ballast being sunk at sea, he (the speaker) had had great experience in the examination of ballast, and he had found the materials used to be chiefly clean and serviceable, particularly the stones, which would be of great use in improving the harbour of Newcastle, where as under the existing regulations it was employed to the detriment of the port. The slight relaxation in the stringent regulations lately instituted had only given relief as far as ballast which arrived from Japan. The restrictions imposed on shipping with regard to ballast and other vexatious enactments would have the effect of throwing miners out of work, and that would result practically to the closing of the port at Newcastle. Rather than send clean serviceable ballast to sea he advocated disinfecting it if necessary, which could be effectively done at a very small cost.

The CHAIRMAN then put the motion, which was negatived. This concluded the business of the meeting.

PROCEEDINGS OF OTHER SOCIETIES.

AUSTRALASIAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE Next Meeting of the Association will be held at the University of Melbourne, under the Presidency of B. L. J. Ellery, Esq., C.M.G., F.R.S., F.R.A.S. The Session will commence on Tuesday, January 9th, 1900, and will be continued throughout the following week. The work of the Session is divided between ten sections, to which Officers have been appointed as follows:—

SECTION A—ASTRONOMY, MATHEMATICS & PHYSICS.

President—G. H. Knibbs, F.R.A.S., University of Sydney; Vice-Presidents—P. Baracchi, F.R.A.S.; Professor J. A. Pollock, B.Sc.; Secretaries—B. J. A. Barnard, M.A.; E. G. Hogg, M.A.

SECTION B—CHEMISTRY.

President—F. B. Guthrie, F.C.S., Sydney; Vice-Presidents—Prof. Mica Smith, M.A.; W. M. Hamlet, F.C.S.; A. N. Pearson; Secretaries—A. W. Craig, M.A.; P. W. Wilkinson.

SECTION C—GEOLOGY AND MINERALOGY.

President—E. F. Pittman, A.R.S.M., Government Geologist, Sydney; Vice-Presidents—A. G. Maitland; A. Montgomerie, M.A.; Secretaries—T. S. Hall, M.A.; G. B. Pritchard.

SECTION D—BIOLOGY.

President—J. J. Fletcher, M.A., B.Sc., Sydney; Vice-Presidents—Prof. Benham, D.Sc.; A. H. S. Lucas, M.A., B.Sc.; C. J. Martin, D.Sc., M.B.; Secretaries—W. Fielder; J. G. Luehmann, F.L.S.

SECTION E—GEOGRAPHY.

President—W. H. Tietkens, F.R.G.S., Maitland, N.S.W.; Vice-Presidents—C. Winnecke, F.R.G.S.; A. C. Macdonald, F.R.G.S.; A. W. Howitt, F.G.S.; Secretaries—T. W. Fowler, M.C.E.; A. G. Wright.

SECTION F—ETHNOLOGY AND ANTHROPOLOGY.

President—; Vice-Presidents—F. J. Gillen; Rev. G. Brown, D.D.; W. E. Roth, B.A., M.R.C.S.; Secretary—Rev. L. Fison, D.D.

SECTION G—ECONOMIC SCIENCE AND AGRICULTURE.

President—Prof. W. Lowrie, M.A., Roseworthy Agricultural College, S.A.; Chairman of Sub-Section of Economics—Prof. Jethro Brown, LL.D., University, Hobart, Tasmania; Vice-Presidents—R. M. Johnston, F.G.S.; J. H. Maiden, F.L.S.; D. Martin; Secretaries—D. Macalpine; J. J. Fenton.

SECTION H—ENGINEERING AND ARCHITECTURE.

President—J. Sulman, F.R.I.B.A., Sydney; Vice-President—H. Deane, M.A.; Secretaries—A. W. Arnott, C.E.; A. M. Henderson, M.C.E.

SECTION I—SANITARY SCIENCE AND HYGIENE.

President—; Vice-Presidents—A. W. Cresswell, M.D.; J. Jamieson, M.D.; Secretaries—B. A. Smith, M.A.; J. W. Springthorpe, M.A., M.D.

SECTION J—MENTAL SCIENCE AND EDUCATION.

President—W. L. Cleland, M.D., Adelaide, S.A.; Vice-Presidents—Rev. A. Gosman, D.D.; F. C. Eddy, M.A.; H. Jackson, M.A.; Secretaries—Rev. E. H. Sugden, M.A., B.Sc.; T. Collins, M.A., LL.B.

In addition to the meetings of the sections, arrangements are in progress for Evening Lectures and Entertainments, and for Excursions to places of interest. Those who purpose attending the meeting are invited to send their Names and Subscriptions (£1) to the Local Secretary of the colony in which they reside. The ticket of membership entitles the holder to attend all meetings and entertainments, and to purchase tickets for the excursions. Each member will also receive *gratis* a copy of the Association's Report. It is hoped that concessions may be granted, as on the occasion of previous meetings, by the Commissioners of Railways and Intercolonial Steamship Companies, to members coming from a distance. Members who have paid their Subscriptions are entitled to purchase Ladies' Tickets at 10s. each. These admit the holder to all the privileges of members, except the right to receive the Report.

LIST OF LOCAL SECRETARIES.

New South Wales—Professor Liversidge, M.A., LL.D., F.R.S., University of Sydney (Permanent General Secretary). Victoria—Professor W. B. Spencer, M.A.; E. F. J. Love, M.A., F.R.A.S., University, Melbourne (General Secretaries). South Australia—Professor W. H. Bragg, M.A.; Professor E. H. Rennie, M.A., D.Sc., University, Adelaide. New Zealand—F. W. Hutton, F.R.S., The Museum, Christchurch. Tasmania—A. Morton, The Museum, Hobart. Queensland—J. Shirley, B.Sc., District Inspector of Schools, Brisbane.

ROYAL SOCIETY OF NEW SOUTH WALES.— MEDICAL SECTION.

A MEETING of the Medical Section of the Royal Society of New South Wales was held at the Society's house on Friday, August 18th, 1899, at 8.15 p.m. Dr. Walter Spencer (Chairman of the Section) presided. There was a fair attendance of members present.

The following papers were read: (i.) "Bubonic Plague in 1141 B.C.," by Frank Tidwell, M.B. Syd., D.P.H. Camb., and J. Adam Dick, B.A. Syd., M.D. Edin. (joint Hon. Secretaries of the Section); (i.) "The Water Supply and Sewerage Systems of Sydney," with numerous lantern illustrations, by J. M. Smail, M. Inst. C.E., Engineer to the Metropolitan Board of Water Supply and Sewerage.

MEDICAL BENEVOLENT FUND OF NEW SOUTH WALES.

THE following subscriptions have been received:—

(1) Subscriptions of £1, representing donations for four years:—Dra. F. Norton Manning, F. M. Blackwood, H. Sinclair Fordyce, Angel Money, F. W. Doak, Wilfrid Nickson, A. A. Cohen, J. B. Nash (Wallsend), A. Andrews (Albury), James McLeod (Hurstville), D. T. Edmunds (Bathurst), G. Scale, W. Traill, L. Hickey (Nyngan), T. Lane (Inverell), F. C. S. Shaw (Emma-ville), J. Preston Hocken (West Wallsend), Professor Anderson Stuart.

(2) Subscription of 10s. for two years:—Dr. S. A. Dowe (Kempsey).

(3) Subscriptions of 5s. for one year:—Dra. P. T. Thane, R. L. Faithfull, E. S. Littlejohn, A. Watson Munro, J. Parker, F. S. Pilkington, C. H. Scott (Bourke), J. English (Yass), W. Helsham (Richmond), Vallee (Inverell), A. H. Meeke (Candelo), George Goode (Orange), F. W. Simpson (Hillend), S. Stephens (Walcha).

F. W. HALL, Hon. Sec.

LETTER TO THE EDITOR.

HOSPITALS v. MEDICAL AID ASSOCIATIONS.

(To the Editor of the Australasian Medical Gazette.)

SIR,—In view of the much discussed subject of clubs and medical aid associations, it might interest your readers to know how far that evil has reached.

On Western Australian Goldfields, which have given such handsome profits to investors and others, the prevailing system of practice is based on 1s. weekly subscriptions per man towards a medical fund—in return for this, the subscribers receive hospital accommodation, medical attendance as in- or out-patients at their homes, and drugs; in other cases, they receive medical attendance at their homes or at the surgery and drugs only. This money is generally collected by the managers of companies or by local committees, to which the Government in many cases subsidizes £ for every £ collected. Medical men in some places receive all the shilling subscriptions, in others only a fixed salary—in the small mining centres, this is the only practice obtainable. The conditions of life and expenses on a gold field are too well known to be worth repeating, but after eleven years' experience in different parts, I conclude that £500 a year in a country district in England, goes farther than £1,500 on a Western Australian Goldfield.

The abuses by these means of practice are many, the following is an illustration:—"The manager of the only mining company here (The Peak Hill Gold Fields Limited) was one of a committee, who engaged me at a salary of £400 yearly on the above system. During last March this gentleman, not liking the idea that I should become interested in some mining properties in the district, waged war against me, by many paltry underhand schemes too childish to mention, with a result unsatisfactory to himself, but rather disastrous to the finances of the hospital committee, by compelling his employees numbering about 150, to withhold their 1s. per week subscriptions, with the result that the committee men were at their wits end to know how to pay their liabilities. Fortunately, the Government acceded, without hesitation, to a request for a donation of £150, which covered temporary difficulties. Your readers can imagine the conditions of practice, when the whole medical man's income depends on the caprices of a mine manager, or a charitable act of the Government; such is the case in many instances. The mine manager then advertised for a medical man for his men, at £350 yearly, allowing him private practice! in a place where the population consists of 500 working men, and where I had already been established for six months. Seven applications were sent, but on making enquiries, none of the applicants thought it wise to accept the position. I took care to let the conditions be known to the Secretaries of the British Medical Association Branches in Australasia. Now as the manager is on his way to England, after many legal complications, he might again try to induce some young and inexperienced medico to apply for the position. This letter I hope will put him on his guard.

Yours etc.,

CHARLES MATTEI, L.R.C.P.

The Hospital, Peak Hill, West Australia,
5th August, 1899.

(For continuation of Letters to Editor see page 408.)

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;

AND FOR THE OTHER BRANCHES OF THE

BRITISH MEDICAL ASSOCIATION BY

M. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; J. B. GUNSON,
ADELAIDE, S.A.; AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH SEPTEMBER, 1899.

EDITORIAL.

THE PREVENTION OF TUBERCULOSIS.

THE medical profession and the general public are now being seriously concerned regarding the prevalence and excessive mortality of tuberculosis amongst the residents of these colonies. It would therefore be expedient to consider what safeguards may be adopted for the prevention and amelioration of this disease, and also to study the measures which have been either suggested or adopted in this as well as other parts of the world.

In November, 1890, the present editor for the proprietors of this *Gazette* had the temerity to sound, in the public press,* the tocsin of alarm concerning the infectiousness of tuberculosis, and to briefly outline some measures for preventing the spreading of the evil.

Numerous authorities on the causation, infectiousness, and transmission of tuberculosis were quoted, as well as the various suggestions for its prevention or mitigation.

At that time the greatest excitement was caused throughout the civilised world concerning Dr. Koch's reputed discovery of tuberculin, and hundreds of medical men and thousands of

patients flocked to Berlin to participate in any advantages to be derived from that panacea. Now that nine years have elapsed, and the utility of tuberculin has not yet been established, the following concluding paragraph may prove interesting :—

Having to deal with such a terribly contagious disorder, the question to be considered is, how far are we to expect success from Dr. Koch's reputed specific cure for the disease? Are we to trust alone to the inoculation of lymph for the cure of the disease? Must we wait until that lymph arrives and then expect it to perform miracles? Rather let us set our houses in order at once, use the best hygienic means for preventing infection and the propagation of the disease. The careful enforcing of the Dairies Supervision Act will no doubt do much in the prevention of infection by means of milk from tuberculous cows; though, by a strange omission in the Act, no power of supervision over factories used in the production of butter is given, yet butter from tuberculous milk is nearly as infectious as the milk and cream that produce it. A more stringent Act for the rigid supervision of all cattle slaughtered for human food is required, to which should be added severe penalties for evading the requirements of the legislation on such an important subject.

The whole of this subject has since been most ably treated by Dr. G. L. Mullins, of Sydney, in a paper read by him before the Section of Sanitary Science and Hygiene, of the Australasian Association for the Advancement of Science, at a meeting held in Sydney early in January, 1898, the full text of which was printed in our issue of 20th January of the same year, page 9. A perusal of Dr. Mullins' paper will prove that he had already exhaustively covered the ground lately exploited by more recent European, American, and Colonial writers and speakers.

In Nottingham, England, this subject has received much attention, and a committee was appointed to formulate a method of action. The result was that at a meeting held on the 13th July in the Exchange Hall, the following resolutions were passed :—

1. That this committee appointed at a public meeting presided over by His Grace the Duke of Portland on June 20th, 1899, to promote a sanatorium for the treatment of persons suffering from consumption in the County of Nottingham, do hereby form the Nottingham and Nottinghamshire Association for the prevention of consumption and other forms of tuberculosis.

2. That the objects of the association be as follows:—(a) To establish in the County of Nottingham (where ten per cent. of the deaths are due to tuberculosis) a sanatorium for the treatment of consumption in persons of limited means; (b) to spread a knowledge of the laws of health, and to encourage voluntary measures tending to reduce the causes of tuberculosis; (c) to co-operate in such educational and voluntary measures with the National Association for the prevention of consumption and other forms of tuberculosis, and with its local branches.

* *Evening News*, 3rd November, 1890.

3. This gives the names of the members of the committee who were to form the said Association.

4. That any person may become a member of the Association on payment of a subscription of 5s. a year.

It is very interesting to note that the following law came into force in the State of Washington on the 10th June:—

Section I.—All practising physicians in cities of the first and second class in the State, are hereby required to report to the local Boards of Health of such cities in writing, the name, age, sex, occupation and residence of every person having tuberculosis, who has been attended by or who has come under the observation of such physician for the first time within five days of such time.

Section II.—All local Boards of Health of cities of the first and second class in this State, are hereby required to receive and keep a permanent record of the reports required by the first section of this Act to be made to them. Such records shall not be open to public inspection, but shall be submitted to the proper inspection of other local and State Boards of Health alone, and such records shall not be published or made public.

Section III.—It shall be the duty of such local Boards of Health, unless requested by the attending physician not to do so, to furnish to each patient, or to the head of the family where such patient resides, printed instructions for the prevention of the communication of such disease to other persons; to enforce compliance with Section I. of this Act; to see that the premises occupied by any such patient are kept in good sanitary condition; and within five days after the death or removal of any such patient to see that such premises are thoroughly and properly disinfected. The expense of such disinfection shall be a charge against the owner of such premises, and, on the failure of such owner to properly disinfect such premises within five days after notice to do so given him by such Board of Health, it shall be the duty of such Board to have such disinfecting done at the expense of such city, and the cost thereof shall be a lien on said premises in favour of such city and may be enforced by the city by proper action.

Section IV.—Any practising physician who shall wilfully fail to comply with the provisions of Section I. of this Act shall be guilty of a misdemeanour, and on conviction thereof may be fined for the first offence not exceeding \$5, and for any subsequent offence not exceeding \$100.

Section V.—It is hereby made the duty of every person having tuberculosis and of every one attending such person, and of the authorities of public and private institutions, hospitals, or dispensaries, to observe and enforce the sanitary rules and regulations prescribed from time to time by the Boards of Health of such cities, and of the State for the prevention of the spread of pulmonary tuberculosis.

It is stated that Buffalo and New York City have had a similar law in force for nearly the last five years, and other communities have made various efforts towards restricting the spread of this disease, but according to the *Philadelphia Medical Journal* this is the first effort made by any state of the American Union.

A league has been established in Italy for combating with consumption, and otherwise alleviating its ravages. A meeting of delegates consisting of leading medical men from all parts of Italy was held in the Academy of Medicine, Rome, on 2nd July, under the presidency of Professor Boccilli, the Minister for Public Instruction. Amongst other speakers, Professor De Giovanni addressed the meeting and urged the foundation of sanatoria in which the germ of contagion could be extinguished. He enumerated various difficulties attending this task, inasmuch as, besides the contagion, there existed the individual disposition to contract the disease, involving a necessity, not only to erect sanatoria, but also to increase the resistance of the constitution against the disease. The league consequently must have both a medical and a social scope. In addition to this, means should be taken for diffusing the knowledge concerning the contagiousness and means to be adopted in resisting tuberculosis, to do which the co-operation of the government, the medical profession and the public would be required.

In the August number of the *Intercolonial Medical Journal of Australasia*, Dr. G. A. Gresswell, President of the Board of Health of Victoria, contributed an able and exhaustive article on "Tuberculosis and its Prevention," which formed the subject of an address delivered by him on 26th July, 1899, to the medical profession convened for the purpose of forming an association for the prevention and cure of tuberculosis.

A careful consideration of the foregoing, with other articles on this subject in contemporary medical literature, would suggest that the following scheme should be adopted in combating with tuberculosis:—

1. A Parliamentary measure to enforce the notification of the disease.
2. The establishment of sanatoria for the observation and treatment of patients suffering from this disease.
3. The formation of a health association, having the object in view of disseminating the necessary knowledge for the prevention or amelioration of the disease by means of lectures, distribution of literature, and contributions to the public press.

Thanks to the energy and enthusiastic action of Dr. Gresswell, some progress has been made in this work in Victoria, and we have no doubt but that there is sufficient go and philanthropic feeling in the other colonies to carry the above or a similar programme to a successful issue.

LETTERS TO THE EDITOR.

(Continued from page 405).

A SAD CASE!

(To the Editor of the Australasian Medical Gazette).
SIR,—A week ago Drs. Paton and Taylor—the Sydney Government Medical Officers—sent me a medical man (L.R.C.P. and S.), as a destitute case of chronic alcoholism, in the hope that I could admit him into "Rest Haven." I did so, without knowing whence the means to keep him were to come, nor do I know now.

He came to me quite an outcast. His case was considered so bad by those who had interested themselves in him, to their loss, that they thought him too degraded to send even to me. Therein, they were wrong; and I am glad the officials mentioned sent him along. He has already become clean and orderly, showing a willingness to obey my rules, and comport himself as a gentleman in a way that would probably much astonish those who wearied of their mistaken efforts to reform him.

But "Rest Haven" is a private institution, and the constant admission of impecunious patients, has caused me considerable loss, so that I am compelled to make special appeals in special cases, such as this. I have had many impecunious medical men, but this is my first appeal for one; therefore, I crave your permission to put the case to the charity of the medical profession here. I wish to keep this patient 12 weeks, until his friends in England can be communicated with. From what I have already seen of him, I believe that this—to him—Providential chance will be the saving of him, if he can be maintained for that period.

The cost price at "Rest Haven" is fifteen shillings (15) per week, and he has no clothing but what he stands in. Will some kind-hearted subscribers to the *Gazette* help me to keep and decently clothe him? He is about five feet eight inches in height; spare build. For any assistance I shall feel grateful; and will acknowledge same in your journal, if you will allow me.

Yours obediently,

COURTENAY SMITH,

Director of Rest Haven.

Trafalgar House, 9 Princes Street,
Sydney, September 12th, 1899.

DELUSIVE ADVERTISEMENTS BY HOSPITALS ON GOLDFIELDS.

(To the Editor of the Australasian Medical Gazette.)
DEAR SIR,—At a meeting of the West Australian Branch of the British Medical Association held on Friday, August 4th last, I was requested to send a copy of the following resolution, to the various branches of the British Medical Association in Australasia:—"That the various branches of the British Medical Association in Australasia be communicated with in regard to the delusive advertisements promulgated by the 'Assisted Hospitals' on the goldfields of this colony, and that the Hon. Sec. be asked to write to the Editor of the *British Medical Journal*, in regard to the same subject."

The reason for this step is as follows:—Most of the goldfields hospitals are controlled by purely local committees, and obtain their funds for the maintenance of the hospital in the following way—(a) *charitable donations* from the more affluent members of the locality; (b) *weekly subscriptions* of 6d., 9d. and 1s. from miners and other working men; the total amount derived in this manner, is then equalled by a Government £ per £ subsidy. The salary of the Medical Officer is from £250 to £300 per annum, with *private*

practice (sic!) and this amount is partially made up of the £100 a year, which the Government pay to the Medical Officer.

The hospitals more especially referred to, are Bulong, Bardoc, Norseman, Mt. Leonora, and Peak Hill.

We have approached the Colonial Secretary, and asked for the redress of many of the abuses which the present system affords, and so may succeed in ameliorating the positions of medical men.

The abuses are briefly these:—

(1) Practically every person, whether rich or poor, subscribes to the Hospital and is treated by the Medical Officer as either an out-patient or a home-patient. The result of this is, that there is *very little, if any, private practice* present in these districts. Further, their drugs and surgical necessities are obtained at the Hospital. In other words, the Government is helping the local committee to form a Friendly Society, and working as they do by means of the 50 per cent. subsidy, the committees are able to compete successfully with the already existing sick clubs, etc., which may have belonged to other medical men settled in the same locality. In this way, all chemists and other doctors are driven to leave the district by starvation. We have impressed upon the Colonial Secretary, that the remedy for this consists in the state *only* paying the £ per £ subsidy on *genuine* local subscriptions and donations, and *not* on the weekly subscriptions also.

(2) The Medical Officer's position is very insecure, since he is open to receive his dismissal from the committee, without any hope of redress, unless he conforms to the rules, regulations and bye-laws, which they may alter at any time. We have asked the Colonial Secretary to make the Medical Officer's position more secure, and less subservient to the whims of these committees, by instituting a regulation, that his dismissal rests with the Colonial Secretary, and that the local committee may only suspend him. Further, that all rules, regulations and bye-laws shall only become enforced, after they have received his sanction.

(3) A considerable amount of extravagance takes place in these hospitals, as the accounts are practically unchecked. We have represented to the Colonial Secretary, that the accounts and the details of expense should be supervised by a competent Government auditor.

(4) We have also suggested, that all the hospitals receiving Government aid, should devote the whole of their funds to the up-keep of the in-patient practice of the hospitals, and that the only out-patients and home-patients who should receive attendance, drugs, etc., should be the poor and indigent, whose circumstances should be certified by the Warden, Head Police Officer, or other Government servant.

As showing you how frauds are practised on the Government by local committees, let me instance the following:—"A comparatively well-to-do man is admitted as an in-patient, and remains in the hospital for four weeks. He is stated by them to be indigent, and therefore the Government pays at the rate £2 10s. a week for him. On leaving the hospital he makes a donation of £16 to the funds of the hospital, and they receive a subsidy of the same amount from the State."

Result: £42 to the good.

I have said enough in this letter to show your readers, that until the whole system is drastically remodelled, medical men should look with suspicion on advertisements proceeding from the goldfields of this Colony, and I hope I have been able to convince them.

Yours truly,

HERBERT HORROCKS, M.D. Lond.,

Hon. Sec. W.A. Branch of B.M.A.

Devonshire Terrace, Perth, West Australia,
7th August, 1899.

"LECTURES ON HEALTH."

(To the Editor of the Australasian Medical Gazette.)

SIR,—I sympathise with "R. H. T.," whose letter appears in your issue of 20th July, to some extent, but not altogether, because his proposal, which is, practically, that medical men should combine to make work for themselves by promoting the spread of disease, or what comes to the same thing, neglecting to take measures for the limitation of it, is a little startling, and one which I hope will not find favour with the profession; because such a course would only tend to the still further lowering of our dignity, besides being futile, because it fails to touch the root of the malady; which is the overcrowded state of the profession, not to mention the huge army of quacks—bone-setters, Christian scientists, prescribing chemists, etc., etc., for the privilege of competing with whom we pay heavy fees to our various medical boards. Of course, I know that "R. H. T." has good reason to complain, and so have we all. One district in Australia is as bad as another—often a little worse. I am, myself, a very *seruus servorum* of the so-called friendly societies. But I know perfectly well that if I complain, or ask for more favourable terms I shall be answered that if I do not choose to continue the contract they can get plenty of men who will be glad to take it over, and I know that they are saying nothing more than the truth. The public is very well able to take care of itself, besides being well looked after by the Government through an army of Government Medical Officers, who are content to work for a pittance in consideration of the dignity which the title bestows upon them. Now, about these "Lectures on Health," which form the text of "R. H. T.'s" letter. Of all the evil weeds produced by overcrowding in the profession, there is none more evil than professional jealousy, and it is to be feared that much of the righteous indignation poured out upon those whom we consider to be advertising themselves is nothing else but a form of this. I never gave a "health" or "ambulance" lecture in my life, but I cannot, for the life of me, see what harm they do. Everybody knows what these lectures are for, and why they are given, and very few take them seriously. I was indebted once, some years ago, for a moderately good fee to a lecture by a young colleague who impressed upon his class of young ladies the danger of allowing midwives to attend women in their first confinement, but that is the only good I have ever known them to do, or harm either. To such an extent is the anti-advertising craze pushed in my district that I am almost afraid to appear in the streets in broad daylight lest it should be said I am trying to advertise myself. If I drive along the main street by day, I am pretty sure to hear it said "Look at X, driving along, as if he were boss of the show" (whatever that may mean). "He is anxious to let all the world know he has had a job." Such a remark, and others equally elegant and in good taste, have been made by my colleagues and reported to me by a mutual friend. I hope I have not written anything to hurt the feelings of "R. H. T." His complaint is a well-founded one, but his remedy is useless. What is wanted is that the young men who crowd into the profession and swell the revenues of the universities should be warned in time that there is no room for them, that if they succeed in running the gauntlet of the examinations, their lot will be, not labour, but disappointment and sorrow.

X.

VITAL STATISTICS.

SYDNEY.—There were 1,026 births and 411 deaths registered in Sydney during July. The principal causes of death were:—Typhoid fever 2; enteritis, 6; pneumonia, 24; cancer, 25; phthisis, 41; scarlet fever, 1; whooping cough, 3; diphtheria, 2; septiciæmia, 5; apoplexy, 19. There were 4 suicides.

MELBOURNE.—The chief causes of death in greater Melbourne during July were as follows:—Diphtheria, 9; cancer, 36; phthisis, 54; whooping cough, 13; bronchitis, 28; typhoid fever, 1; enteritis, 13; pneumonia, 59. There were 595 deaths registered during the month.

TASMANIA.—The Government Statistician's report on the vital statistics of the colony shows that during the month of July 128 births were registered in Hobart and Launceston. The deaths numbered 101. The chief causes of death were:—Whooping cough, 3; cancer, 7; old age, 20.

BALLARAT.—During July there were 5 deaths from cancer, 8 from phthisis, 4 from pneumonia, 2 from whooping cough.

NEW ZEALAND.—During July the number of births and deaths respectively were in Auckland, 119, 45; Wellington, 81, 31; Christchurch, 76, 43; Dunedin, 72, 48. Total births, 347; total deaths, 167. In the four cities there were deaths from cancer, 6; phthisis, 18; old age, 14; premature birth, 9; pneumonia, 11.

BRISBANE.—During the month of July there were registered 143 births, and 74 deaths. There were 18 deaths from phthisis, 2 from diphtheria, and 1 from typhoid fever.

MILITARY INTELLIGENCE.

NEW ZEALAND.—The following appointments have been approved by his Excellency the Governor:—*New Zealand Volunteer Medical Staff*: James Murdoch, to be Surgeon-Captain; Henry Thomas Joseph Thacker to be Surgeon-Captain. Surgeon-Captain Benjamin Michael Moorhouse resigns his commission.

QUEENSLAND.—General Orders of Queensland Defence Force.—Daniel Patrick O'Brien, F.R.C.S.I., &c., has been appointed Captain in the Queensland Defence Force (Land), 23rd August, 1899.

OBITUARY.

EDWARD BOOT, M.R.C.S. Eng. 1887, died on September 5th, at Moruya, N.S.W., where he had practised for fifty-eight years. He was 86 years of age.

HENRY BRETON, M.D. Edin. 1853, died in July at Camberwell, Vic. He landed in Victoria thirty-seven years ago, and formerly practised at Wentworth, N.S.W., for many years.

JAMES DICKINSON, M.B. Lond. 1893, died recently at Bridgetown, W.A.

CARL NICOLAUS REIMER, M.D., who practised at Dunedin, N.Z., for the past twenty-nine years, died there on July 7th, aged 68 years.

HORATIO THOMAS WHITTELL, M.R.C.S. Eng. 1848, M.D. Aberd. 1859, M.D. Adel. 1877, formerly City Coroner, President of the South Australian Central Board of Health, and Consulting Surgeon to the Adelaide Hospital, died in Adelaide on August 21st. Dr. Whittell had practised in Adelaide for forty years.

HOSPITAL INTELLIGENCE.

TASMANIA.

A HOMŒOPATHIC Hospital is to be opened in Hobart, and the Government has promised a subsidy of £250 on the £ for £ principle. It is stated that nearly £300 have already been promised. The residents in the neighbourhood are unanimously objecting to the site of the hospital, but the Central Board of Health has given permission, and their decision is final.

MEDICAL NOTES.

Dr. A. A. Lendon, Lecturer on Forensic Medicine and Lecturer on Clinical Surgery at the University of Adelaide, has been licensed to practice anatomy at the School of Anatomy established in connection with the University of Adelaide for and during such time as he shall hold the above-mentioned lectureships.

"One Man One Billet."—South Australia is regarded by some as being a community where the above political shibboleth is current; what will the democratic conscience say to the following appointments by the South Australian Government?—W. Ramsay Smith, B.Sc., M.B., M.S., to be Chairman of the Central Board of Health, City Coroner, Vaccination Officer, Inspector of Anatomy, Senior Resident Physician, Adelaide Hospital, &c., &c.

MEDICO-PARLIAMENTARY.

THE HOSPITAL MANAGEMENT QUESTION IN TASMANIA.

The Premier, in answer to a question by Mr. Crisp, promises to go on with the Hobart and Launceston Hospitals Bill at the earliest possible opportunity.

CHANGE OF ADDRESS, ETC.

ANDERSON, Dr. J., late of Mount Victoria, N.S.W., has succeeded to the practice of Dr. Hay, Cobden, Vic.

CAMPBELL, Dr. M., formerly of Patea, has gone to Christchurch, N.Z.

COSH, Dr. J. I. C., late of Prince Alfred Hospital, Sydney, has returned from Europe, and has commenced practice at Mosman, a northern suburb of Sydney.

DEAN, Dr. C. E., has removed from Bunbury to Bridgetown, W.A.

DONALDSON, Dr. W. H., formerly of the Melbourne Hospital, has commenced practice at Launceston, Tas.

LANDER, Dr. C. D., has commenced practice at Mosman, near Sydney.

MACDONALD, Dr. G. B. D., formerly of Murwillumbah, N.S.W., has returned to the colony from Africa, and has commenced practice at Mossiel, N.S.W.

SINCLAIR, Dr. HENRY, formerly of Liverpool street, Sydney, has resumed practice at 243 Elizabeth-street, Hyde Park, Sydney, after an absence of four years in Europe.

STEWART, Dr. P. B., has commenced practice at Coraki, N.S.W.

TIGHE, Dr. JOHN M., has removed from Murchison to Warracknabeal, Vic.

WYNN, Dr. E. T., has removed from Rockhampton to Chillagoe, Q.

We are requested to state that Dr. L. E. Ellis, of the Children's Hospital, Glebe, has not commenced practice at Wardell, as reported in our last issue, but is still at the Children's Hospital, Glebe Point, Sydney.

REVIEWS.

EXTRA-UTERINE PREGNANCY—A CLINICAL AND OPERATIVE STUDY. By John W. Taylor, F.R.C.S. Eng., Senior In-patient Surgeon to the Birmingham and Midland Hospital for Women, etc., etc. 205 pages, 8vo., with 65 illustrations and diagrams mostly original. London: H. K. Lewis, 1899. Price, 7s. 6d.

The Ingleby Lectures for 1898 have formed the basis of this book, which deals in a very lucid manner with the subject of extra-uterine pregnancy as to its causation, forms, diagnosis and treatment. The author writes as one who has made a special study of his subject, as is indeed borne out by his table of forty-two operations with only one death. He differs from Bland Sutton (Allbutt and Playfair's System of Gynecology) and the late Lawson Tait as to the course of events in a tubo-abdominal pregnancy, especially as to the formation of the gestation sac, and maintains that after the rupture of a tubal pregnancy the fœtus can only go on developing in the abdominal cavity when the amnion remains intact. Mr. Bland Sutton has, in a recent communication to the Obstetrical Society, accepted the conclusions of the author as given in his Ingleby Lectures regarding the origin of tubo-abdominal pregnancy. In a chapter on diagnosis (page 96) the description of a case of earliest rupture of the tube with diffuse hæmorrhage is particularly graphic, and anyone who has witnessed such a case and seen the patient snatched from the very jaws of death by operative interference, cannot fail to regard it as one of the greatest triumphs of modern surgery. The author adopts the operation of posterior vaginal section for cases of tubal mole and peri-tubal hæmatocele where practicable, and in abdominal sections for cases of tubo-abdominal pregnancy at term he advocates the removal of the placenta, which is contrary to the opinion he formerly held. This little book should be in the hands of every practitioner.

ON THE USES AND ABUSES OF THE PUBLIC HOSPITALS IN AUSTRALIA, TASMANIA, AND NEW ZEALAND, with thirty-two practical suggestions for reform. By L. Bruck. Sydney, 1899: L. Bruck.

This is a very well written pamphlet of seventy-two pages, and possesses a special value from the fact that it has been written by a layman. Mr. Bruck has had an extensive business connection with the medical profession of these colonies for a period of twenty-six years, and claims to be in a position to speak with authority on the vexed hospital question. He has already written upon medical and kindred subjects, being the compiler of four editions of the "Australasian Medical Directory and Handbook," and has written the following works:—"Guide to the Health Resorts of Australia, Tasmania, and New Zealand" (1888), "The Mineral Springs of Australasia" (1891), "The Present State of the Medical Profession in Australia, Tasmania, and New Zealand" (1893), and "The Sweating of the Medical Profession by the Friendly Societies in Australasia" (1896). He also in 1881 founded the *Australasian Medical Gazette*. With such an industrious record as this Mr. Bruck's observations on the uses and abuses of public hospitals in these colonies are entitled to respect.

Part I. is devoted to some statistical calculations, which must have involved a large amount of research and trouble. We are informed that in these colonies there are 364 public hospitals, and the number for

each colony is stated. The proportion of each hospital to the number of inhabitants and to the number of square miles, the total number of beds available, the total number of in-patients, the average time of residence in hospital by each patient, the out-patients treated at hospitals, their sex, the total number of operations performed, and the monetary value of medical and surgical services rendered in these hospitals are set down with great clearness and precision.

Part II. consists of an analytical inquiry into the principal uses of the public hospitals and a careful consideration of the various abuses to which they are subjected; and it is concisely shown that, while public hospitals are supposed to be founded for the gratuitous treatment of the sick poor, through a faulty system in the selection of suitable recipients of charity, the institution of pay wards and other causes of leakage, such as numerous unsuitable subjects, well-to-do people and impostors obtain admission, while thousands of deserving cases of charity are turned away every year from the hospital doors.

In Part III. the author gives his views as to the best method of placing hospitals on a proper footing, and to abolish abuses. He concludes with thirty-two practical suggestions for carrying out the reforms which he advocates.

Mr. Bruck is to be commended upon his extensive labour in compiling this pamphlet, and his disinterested liberality in distributing it gratuitously for the public good and not for his personal profit. It must be remembered that his observations and criticisms are from a layman's point of view, and therefore void of any possible bias that might have been imparted to them were the writer a member of the medical profession. This pamphlet, we are informed, has been freely distributed to the medical profession and the press of these colonies.

AN INTRODUCTION TO DERMATOLOGY WITH A FRONTISPIECE, 29 PLATES AND 34 ILLUSTRATIONS IN THE TEXT. By Norman Walker, M.D., F.R.C.P. Edin., Assistant Physician for Diseases of the Skin to the Royal Infirmary, Edinburgh. Bristol: John Wright and Co. London: Simpkin, Marshall, Hamilton, Kent and Co., 1899. Sydney: L. Bruck. Price, 8s. 6d.

This work is practically a reproduction of the lectures, which for several years, the author delivered to his students at the Royal Infirmary, Edinburgh. The author wishes it to be understood, that the title of the book is "An Introduction to Dermatology," and therefore it does not profess to be a complete system. In it he describes fully all the more common diseases, and less completely those rare ones, which the ordinary practitioner occasionally meets with, while he has omitted some of those rare conditions, which are mainly of interest to the specialist. The author candidly acknowledges the assistance which he has received from the writings of others, and expressly states his indebtedness to Dr. Allan Jamieson and Dr. Unna, with whom he was closely associated in the practice of this speciality. He, however, claims originality in some special views which he has advanced on the subjects of Eczema, Seborrhoea, Lichen and Lupus Erythematosus. The contents of this book are admirably classified, and divided into various sections as follows:—Section I., Introductory, giving a brief sketch of the classification, Diagnosis and various methods of treatment of skin diseases; then follows other sections, each treating of Anomalies of Sensation, Anomalies of Secretion, Anomalies of Circulation, Traumatic Inflammations, Neurotic Inflammations,

Infectious Inflammations, New Growths (Malignant and Benign), Retrogressive Changes (Atrophies), Malformations, Saprophytes and Anomalies of Pigmentation.

The book is well and clearly printed, and amply illustrated with coloured plates, photographic reproductions, and microscopical drawings, most of which are from life, from preparations made by the Author, and from living subjects who attended his clinics. We have much pleasure in recommending this work, not only to students, but to the general practitioner, and to specialists in Diseases of the Skin.

OUR BABY: FOR MOTHERS AND NURSES (SIXTH EDITION REVISED). By Mrs. Langton Hewer, Diplomee Obstetrical Society, London, late Hospital Ward Sister. Bristol: John Wright and Co. London: Simpkin, Marshall, Hamilton, Kent and Co., 1899. Price: Paper, 1s. 6d.; cloth, 2s. 6d.

The fact of this useful work having reached its sixth edition, speaks strongly in its favour. The 150 pages comprise fifteen chapters, and its scope can be better comprehended by the following summary of the contents:—The Baby, the Dressing of the Baby, the Feeding of the Baby at different periods of its existence, Instructions as to the Baby's Environments, Feeding, Exercises, Sleep and Growth, the Nursing of the Baby, and its Troubles, Illnesses and Accidents, and directions regarding the treatment of all these contingencies.

The subjects are handled in a clear, concise and able manner, and we are informed in the Introduction that the medical chapters have been specially written for this book, and the whole of the contents has had the advantage of being revised by a London physician.

THE HYGIENE OF THE MOUTH. A Guide to the Prevention and Control of Dental Diseases. By R. Denison Pedley, F.R.C.S. Ed., L.D.S. Eng., Dental Surgeon to the Evelina Hospital for Sick Children. London: J. P. Segg and Co. Price, 2s. 6d.

This modest volume contains but two chapters. The first, on the hygiene of the mouth in children has already appeared in Mr. Pedley's former work on "The Diseases of Children's Teeth." It is, however, so good that it will bear reproduction, and we consider it a practical sensible article.

The second part of the book is devoted to a consideration of the hygiene of the mouth in adults. Mr. Pedley, while pointing out the measures to be adopted for the prevention of dental diseases in adult life, has emphasised their importance by a brief description of dental caries, its progress, complications, and treatment. The influence of neglected mouths upon the general health is fully illustrated by individual typical cases. We cordially recommend Mr. Pedley's book.

THE NEWER REMEDIES, A REFERENCE MANUAL FOR PHYSICIANS, PHARMACISTS AND STUDENTS. By Virgil Coblentz, A.M., Phar. M., Ph.D., F.C.S., &c., Professor of Chemistry and Physics in the New York College of Pharmacy, &c. Third edition. Philadelphia: P. Blakiston's Sons and Co., 1899.

To the busy practitioner the increasing number of new remedies renders it difficult to keep up to date, therefore Professor Coblentz's work comes at an opportune time.

The author's endeavour is to present as complete a list as possible. The various articles are arranged in a concise, alphabetical form, synonyms being given in their proper places, with cross-references, so that the information wanted can be found with the least expenditure of time and trouble.

The first two editions, published in 1895 and 1896, having become exhausted the present edition has been revised, and is very much enlarged.

DISEASES OF THE EAR, NOSE, AND THROAT, AND THEIR ACCESSORY CAVITIES. By Seth Scott Bishop, M.D., D.C.L., LL.D. Professor of Diseases of the Nose, Throat, and Ear in the Illinois Medical College; Professor in the Chicago Post-Graduate Medical School and Hospital; Surgeon to the Post-Graduate Hospital. Second edition. Illustrated with ninety-four chromo-lithographs and 215 half-tone and photo-engravings; pages, xix—554. Philadelphia: The F. A. Davis Co., 1898.

Some two years ago we had the pleasure of reading and reviewing the first edition of this interesting work, of which we expressed approval. This (the second) edition has been enlarged, and many of the articles written with greater detail. Two new chapters and illustrated articles on "Direct Laryngoscopy" and "Pachydermia Laryngis" have been added, which serve to improve the work.

The excellence of the illustrations, combined with the plain descriptions of the various diseases serve to make the volume one of the most interesting on the subject of Ear, Nose, and Throat Diseases.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced:

- Aoton, F. C., M.B., &c., to be Public Vaccinator at Yackandandah, Vic., *vice* Dr. J. Coane, resigned.
- Andrews, Dr. Wm., to be Honorary Physician to the Melbourne Hospital.
- Barker, W. H., M.B.C.S. Eng., &c., to be Medical Superintendent of the Ararat Lunatic Asylum, Vic., *vice* Dr. W. E. Smith, transferred.
- Boyd, Dr. W. R., to be Honorary Physician to the Melbourne Hospital.
- Campbell, Dr. A. C., to be Junior Medical Officer, Lunatic Asylums Department, Vic., *vice* Dr. J. L. Thompson, resigned.
- Campbell, M. M.B., N.Z., &c., to be Assistant House Surgeon, Christchurch Hospital, N.Z.
- Dalsh, Dr. Wm., to be Honorary Physician to the Melbourne Hospital.
- Dean, Dr. E. C., to be Health Officer for the Bridgetown Local Board of Health, W.A.
- Godfrey, C. G., L.R.C.S. Ed., &c., to be Assistant Medical Officer in the Professional Division of the Public Service, Vic.
- Graham, A. W., M.B., &c., to be Medical Officer of Health for Beaconsfield, Tas., *vice* Dr. Joyce, resigned.
- Herman, Dr., to be Honorary Physician to the Melbourne Hospital.
- Horrocks, H., M.D., to be a member of the Dental Board for West Australia.
- Hutchens, H. J., M.R.C.S. Eng., &c., to be Medical Officer at Beemleigh, Q., *vice* Dr. A. Sutton, resigned.
- James, W. H., M.B., &c., to be Public Vaccinator at Kangaroo Flat, Vic., *vice* Dr. G. O'Donnell, resigned.
- Jamison, A., M.D., to be a member of the Dental Board for West Australia.
- Jones, Dr. C. H., to be Health Officer Day Dawn Local Board of Health, West Australia.
- Kenny, Dr. L.R.C.S.I., &c., to be a member of the Dental Board for West Australia.
- Lawrence, Dr., to be Honorary Physician to the Melbourne Hospital.
- Macfarlane, W. H., M.B. Melb., &c., to be Superintendent of the Hospital for Inebriates, New Norfolk, Tas.
- MacLean, R., M.B., &c., to be Public Vaccinator at Kaniva, Vic., *vice* Dr. T. F. Ryan, resigned.
- Mason, W., M.R.C.S., &c., to be Public Vaccinator at Steiglitz, Vic., *vice* Dr. A. B. Webb, resigned.
- Mullen, W. L., M.D. Melb., &c., to be Senior Medical Officer at the Metropolitan Lunatic Asylum, Vic., *vice* Dr. O. G. Godfrey, transferred.
- Nihill, Dr. J. E., to be Honorary Physician to the Melbourne Hospital.
- Parley, J. M., M.B., &c., to be Deputy Health Officer for the Port of Launceston, Tas.
- Reed, James, M.R.C.S. Eng., L.S.A. Lond., to be Surgeon to the Hospital at North Palmerston, N.Z.
- Rockett, P. J. A., M.B. Melb., to be Officer of Health for Gormanston, Tas.

- Rogers, J. E., M.B., &c., to be Public Vaccinator for District of Portree, N.Z.
- Scott, J. M., M.B. Melb., to be Junior Medical Officer, Lunatic Asylums Department, Vic., *vice* Dr. W. L. Mullen, transferred.
- Smith, V. A. J., L.R.C.S.I., &c., to be Visiting Surgeon, Grafton Gaol, N.S.W., *vice* the late Dr. Hadley.
- Sprott, Gregory, M.D., D.P.H., &c., to be Deputy Health Officer for the Port of Hobart.
- Stewart, A., M.B., to be Medical Officer at Dalby, Q., *vice* Dr. A. Y. Fullerton, left the district.
- Stokes, Edward S., M.B. Syd., to be Resident Surgeon and Dispenser at Trial Bay Prison, N.S.W., *vice* Dr. Franklin.

MEDICAL RESIGNATIONS.

The following Medical Resignations are announced:

- Kelsall, H. T., M.D., &c., as a member of the Dental Board of West Australia.
- Saw, A. J. H., M.B., &c., as a member of the Dental Board of West Australia.
- Spence, H., M.B., as Public Vaccinator at Strathmerton, Vic.
- Tratman, F., M.D., &c., as a member of the Dental Board of West Australia.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

- Lander, Charles Dickson, M.B., Mast. Surg. 1896 Univ. Edin.
- Charlton, Alfred, M.B., Mast. Surg. 1896 Univ. Glasg.
- Szarfstein, Abram Slama, Head Surgeon, Univ. Warsaw 1885.

For Additional Registration.

- Halliday, John Charles White, D.P.H. Camb. 1899.

QUEENSLAND.

- Butler, Arthur Graham, Bae. Surg. 1897, M.D. 1899, Univ. Camb.

SOUTH AUSTRALIA.

- Smyth, Robert, L.R.C.P. & L.R.C.S. Edin. 1896, L.F.P. & S. Glasg. 1896.
- Brennan, John McDonald, L.F.P. & S. Glasg. 1863.

TASMANIA.

- Donaldson, William Henry, M.B. Melb. 1896.

VICTORIA.

- Soule, William Lamson, M.D. Boston, U.S.A., 1896.
- Iovine, Agostino Gaetano, M.D. Naples 1896.

WESTERN AUSTRALIA.

- Dean, Edmund Clapperton, M.R.C.S. Eng. 1899, L.R.C.P. Lond. 1899.
- Jull, Roberts Henrietta Margueretta, M.B. Glasg. 1896, M.S. Glasg. 1896.

BIRTHS AND DEATHS.

BIRTHS.

- ANGEL MONEY.—On the 26th August, at 75 Hunter-street, Sydney, the wife of Angel Money, M.D., F.R.C.P. Lond., of a son.
- HENRY.—On the 14th September, at her residence, Callan Park, the wife of A. G. Henry, M.B., Ch.M., of a daughter.
- MAHER.—On the 16th August, at "Letitia," Strathfield, Sydney, the wife of Dr. Odillo Maher, of a daughter.
- M'DONNELL KELLY.—On the 11th August, at 285 Elizabeth-street, Sydney, the wife of Dr. McDonnell Kelly, of a son.
- MOORE.—On the 29th August, at Bakhurst, N.S.W., the wife of Dr. J. B. Moore, of a son.
- MURRAY-WILL.—On the 14th August, at 219 Macquarie-street, Sydney, the wife of A. Murray-Will, M.B., of a son.
- SHAW.—On the 28th August, at Ennawille, N.S.W., the wife of F. C. Seymour Shaw, M.B., Ch.M., of a daughter.

DEATHS.

- HENRY.—On the 16th August, at "Aloha," Manly, Sydney, Marjorie, second daughter of Arthur Henry, M.B., Ch.M., 2 years and 6 months.
- WHITTELL.—On the 21st August, at his residence, East-r-race, Adelaide, Horatio Thomas Whittell, M.D.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

BUBONIC PLAGUE IN 1141 B.C.

BY FRANK TIDSWELL, M.B., CH.M. SYD.,
D.P.H. CAMB., AND JAMES ADAM DICK,
B.A. SYD., M.D., C.M. EDIN., JOINT
HON. SECS. OF THE MEDICAL SECTION OF
THE ROYAL SOCIETY OF NEW SOUTH
WALES.*

IN a few of the many articles on plague which have recently appeared in the medical press, there has been reference to certain passages in Holy Writ, which contain a description of what has been regarded as an epidemic of bubonic plague. Some three years ago we collected notes concerning the history of plague, and, *inter alia*, some upon the passages in question. For various reasons the notes were not published at the time they were written, but we now venture to submit them for your consideration. But before proceeding to discuss the passages themselves, we would call attention to such characteristics of plague as seem to have bearing on their interpretation.

Bubonic plague is a disease which has been known and dreaded for many centuries on account of its tendency to occur in widespread epidemics, causing immense loss of life. Usually these epidemics have appeared quite suddenly, spread like wildfire, killed thousands of men and lower animals, and after a few years disappeared again. But although attracting special attention only at the times of its epidemic prevalence, the disease does not die out altogether in the intervals. It merely becomes restricted in its incidence to certain areas which constitute its endemic seats or centres, and within which it is constantly in existence. At the present time there appears to be five such centres; one in the north of Africa in the Bengazi district, one in the Azir district of Arabia, one in the mountains of Khurdistan in Persia, one in the Himalayas in India, and one in the Yunnan district of China.¹ All the more recent epidemics have been traced to one or other of these centres; the most recent, that which appeared in China in 1894, and is still prevalent in India, and has spread to Egypt and Portugal and other places, is said to have had its source in the Yunnan centre, where plague is known to have recurred every year since 1860.²

This last epidemic in India has furnished the opportunity for the study of the disease by modern methods of research. As all the world knows, the specific microbe has been discovered, a method of protective inoculation devised, and two different curative serums prepared. Further, the disease has been found to have at least three clinical varieties—septicæmic, pulmonary, and bubonic, which, however, are usually more or less combined. The general tenor of the reports is to the effect that plague appears as a serious disease, characterised at times by very rapid prostration, collapse, coma, and death within 24 hours of the onset;³ at others enduring longer, in which case the classical buboes are apt to appear. The buboes are usually to be found in the groins, but may occur in the armpits, along the neck, and elsewhere. The other striking feature of the disease is hæmorrhage, which may take place from all the orifices of the body—nose, mouth, bowel and bladder, or beneath the skin, or internally.⁴ The epidemic fatality is excessive, from 50 to 90 per cent. of attacks proving fatal.⁵

Epizootics on cattle, sheep, mice, and rats, precedent to, or coincident with, the outbreak of the disease in man, are recorded in many of the older reports, often under the designation of "murrain." Recent accounts contain the same statements.⁶ Observations made during the present epidemic in India have shewn that the disease in rats is due to the same cause as in man, viz., infection with bacillus pestis bubonicus of Kitasato.⁷

Briefly, then, plague presents itself as a very severe disease, more or less sudden in onset, attacking both men and lower animals, having a high fatality, and in man specially characterised by bubonic swellings and hæmorrhages.

Now these are the symptoms which have been associated with plague from time immemorial. In comparing the features of the present epidemic with those described by the earliest writers, one cannot fail to be struck by the remarkable fixity of type displayed by plague throughout past ages. The definition of plague given in the last edition of Quain's Dictionary of Medicine published in 1894, refers to it as a "specific fever, attended by bubo of the inguinal glands, and occasionally by carbuncle." A description written in 280 B.C., refers to it as "pestilentes bubones, maxime lethales et acuti."⁸ Intervening between these two, there are a whole series of accounts in which there is always the same record of a serious epidemic

*Being an extension of papers contributed to the 5th Intercolonial Medical Congress, Brisbane, 1899, and to the Medical Section of the Royal Society of N.S.W., Session 1899.

disease, with buboes and sometimes hæmorrhages. The writings of Defoe,⁹ Sydenham¹⁰ and Thomas Lodge,¹¹ have made us familiar with the disease as it appeared in the 17th century. From the 14th century come the numerous records of the terrible "Black Death," which is said to have killed 25 millions of people,¹² and of which Giovanni Boccaccio has left us so excellent a description in his introduction to the Decameron. From the sixth century we have many accounts of the epidemic which overran the Roman Empire in Justinian's time,¹³ and which is said to have "depopulated towns, turned the country into desert, and made the habitations of men to become the haunts of wild beasts."¹⁴ The frequent use of such terms as "pestis inguinalis," "glandularia," "clades inguinalis," "pestis bubonicus," in the chronicles of the period, sufficiently indicate the nature of the disease. This sixth century epidemic appears to mark the first visitation of the disease to Europe, but plague was known to exist in Egypt long before this time. Through the writings of Oribasius, physician to the Emperor Julian, there has come down to us a description of plague by Rufus of Ephesus, based on observations made by two physicians, Dioscorides and Posidonios, who lived during the first century A.D. Rufus also mentions that the disease was well known to the contemporaries of Dionysius, as existent in Egypt, Lybia, and Syria in their times, the third century B.C.¹⁵

According to Hirsch the distinguished epidemiologist, there are no certain references to plague in earlier medical or historical writings. He considers the mention of buboes by Hippocrates as too indefinite to merit reliance. It may be taken, therefore, that the authentic record of plague has not been traced back beyond 300 years before the time of Christ.

The passages in the Scripture, mentioned at the outset of this paper, appear to signalise a still earlier epidemic. They occur in the First Book of Samuel (ch. iv. to vi.), and narrate the defeat of the Israelites and the capture of the Ark of the Covenant by the Philistines at Ebenezer in about the year 1141 B.C., and they tell of the events that occurred subsequent to the arrival of the Ark in Philistia. The Ark was first taken to Ashdod, and to its presence in that city was attributed the severe illness that broke out amongst the people. "The hand of the Lord was heavy upon them of Ashdod, and He destroyed them and smote them with emerods, even Ashdod and the coasts thereof" (ch. v., 6). Terrified by this disaster the people of Ashdod sent the Ark to Gath, and here also the disease appeared.

"The hand of the Lord was against the city with a very great destruction and He smote the men of the city, both great and small, and they had emerods in their secret parts" (v. 9). The Ark seems to have been afterwards carried from place to place until it finally reached Ekron, and here again we are told: "There was a deadly destruction throughout all the city, . . . and the men that died not were smitten with the emerods, and the cry of the city went up to heaven" (ch. v., 11, 12). After seven months' experience of "destruction" and "emerods," the Philistines decided to send away the Ark, to the presence of which amongst them they attributed their illness. Accordingly the services of "priests" and "diviners" were requisitioned to decide as to the best means of restoring the Ark to the Israelites. They advised that, in addition to the Ark, a trespass offering should be sent, to consist of "images of your emerods and of your mice that mar the land." This advice was followed, and the Ark, together with the images, went back to Israel on a new cart drawn by two milch kine. The Philistines accompanied the Ark on its journey as far as the borders of Bethshemish, where it arrived at the time when "they of Bethshemish were reaping their wheat harvest" (ch. vi., 13). The Israelites took down the Ark and the coffer, and "clave the wood of the cart and offered the kine as a burnt offering unto the Lord" (ch. vi., 14). Amongst the people of Bethshemish there followed a severe disease of which many died, but no particulars of its nature are given. In response to a message men came from the neighbouring city of Kirjath Jearim, and conveyed the Ark to the house of one Abinadab, where it was kept under special guardianship for twenty years.

The accounts of these events in the LXX. (Septuagint), and in the Authorised and Revised versions are practically identical, but in the revised version the word "tumour" is used instead of "emerods," and a marginal note adds "or plague boils, as read by the Jews emerods." Josephus¹⁶ refers to the epidemic amongst the Philistines as "a very destructive disease," "a sore distemper that brought death upon them suddenly," for the people "died of dysentery and flux," and before death "brought up their entrails and vomited up what they had eaten and what was entirely corrupted by the disease." Thomas Lodge in his translation of Josephus,¹⁷ says, "the people being suddenly taken with the flux died in great torment, and some of them vomited up their bowels being corrupted and corroded with the disease."

Both translations refer to the mice as destroying the crops, and to the images sent with the Ark to Bethshemish.

The medical evidence furnished by these accounts indicates that the Philistines suffered from an outbreak of epidemic disease. This disease was of sudden onset and marked severity, for it "smote" men with "a very great destruction." It was of wide and rapid spread, for in seven months (four according to Josephus) it became so disseminated as to create public alarm. A special assembly of priests and diviners was convened to deal with it, and the Philistines were induced to part with a war trophy—the Ark—on which they must have set a very high value. The physical symptoms, (i.) emerods in secret parts, (ii.) vomiting of foul material, and (iii.) dysentery or flux, need some discussion.

(i.) The word "emerod" has usually been taken to mean hæmorrhoids, that is piles, but this has been contested. It is to be noted that the original connotation of the Greek word is not "piles" but "a flow of blood," just, indeed, what Josephus may be supposed to mean by "dysentery or flux." It is significant that Josephus makes no mention of emerods but only of dysentery, that is, he gives the word its correct Greek interpretation. Nevertheless, emerods must mean tumours or swellings, since the Philistines were able to "make images of their emerods." Dr. William Smith¹⁸ states that the word has affinities with Hebrew roots signifying anus or nates (secret parts), and in his discussion of the affliction of the Philistines he comes to the conclusion that "some morbid swelling seems to be the most probable nature of the disease." In default of any better explanation he appears to have accepted the conjecture that "hæmorrhoidal tumours" are meant. He mentions that Wundebbar refers to a bloodless kind of emerod distinguished by the Talmudists as very dangerous, and this kind he (Wundebbar) supposed to be referred to in the description of the disease in the First Book of Samuel. But the fact is the word "emerod" is exactly comparable to our own word "tumour" in that it has no exact significance. It has already been mentioned that the revised version has tumour or plague boil instead of emerod. It is significant that in India a local name for the plague is the boil.¹⁹ The Rev. W. G. Maconochie, M.A.,²⁰ informs us that the Hebrew word occurring in the description in Samuel is "Ophel," which originally meant a hillock or swelling, but has acquired a wider sense, and has amongst others been used to designate hernia. Consequently it might

well have been applied to bubonic swelling in the groin, which resembles hernia in appearance. Professor George Adam Smith, D.D., of Glasgow²¹, would also translate as swellings or boils. Professor Cosh²² writes: The Hebrew words used to designate the disease are *ophel* and its plural form *ophalim*. In the singular *ophel* means something swollen; in the plural it is used as the designation of the disease in question (I. Sam., v., 6, 9, 12; vi., 4-5; Deut. xxviii., 27), and is understood to denote a swelling of some sort, a tumour or boil or tumours or boils. The remarks of Dr. William Smith concerning the affinities of the word with others signifying nates, suggest the site of the swellings. The "secret parts" were probably the nates or groins, the commonest sites for plague buboes. Referring to the incident, Professor H. P. Smith says: "We can hardly go astray in seeing in it a description of the bubonic plague" (Intern. Com. on Sam., p. 40), an opinion which is shared by Professor Kirkpatrick, of Cambridge.²³ From these considerations we think it may fairly be inferred that the "emerods" were really the glandular buboes of plague.

(ii.) The vomiting of "corrupted or corroded matter" denotes hæmatemesis. The vomit of plague contains altered blood ("black vomit"), and is said to have an extremely foul odour, so that it might justly be referred to as "corrupted matter," this expression being in common use amongst older writers to indicate hæmatemesis.

(iii.) By dysentery or flux is meant the passage of blood by the bowels. The descriptions inform us, therefore, that hæmorrhage occurred both per os and per anum, a condition of affairs characteristic of plague.

A still further point in favour of plague is the season of the year at which the epidemic occurred. This is fixed by the mention of the arrival of the Ark at Bethshemish at the time of the wheat harvest, which in Palestine is long, and in Philistia is from April to June.²⁴ The disease had prevailed amongst the Philistines for the previous six or seven months, that is from November or December till May or June. The plague season in Egypt, Syria, and Asia Minor generally, is from November to June or July.²⁵ Consequently the epidemic in question was incident on the Philistines at the time of the regular plague season.

An interesting point is the mention of mice in relation to the epidemic. There is only one such reference, viz., that which occurs suddenly

and unexpectedly in connection with the images to be sent with the Ark. The expression is "mice that mar the land" ("earth," as Principal Kinross²⁶ would also translate), and it has usually been assumed that this indicates the destruction of crops, fruit, etc., by mice in large numbers.²⁷ We know that mice can so destroy crops, but it has been questioned whether this is what is meant by the reference. Professor Cosh²³ writes: With reference to the 'mice,' the word (*ak-l're*) etymologically denotes 'a burrowing animal.' In the description given of the plague itself in the Hebrew Bible no mention is made of mice. It is only when we come to the question as to the offering to be made in expiation of the wrong done to Jehovah by the detention of the Ark that the word mice occurs. The offering prescribed was five golden *ôphâlm* and five golden 'mice.' If the Hebrew represent the correct form of the text, then the inference is that there was only one plague, viz., that of the *ôphâlm*, and that there was a double offering, one (the mice) as the general emblem of a pestilence destroying the land, and the other (the *ôphâlm*) as the representation of the particular form in which this particular pestilence had manifested itself. This is the opinion of Wellhausen, and is favoured by Driver and H. P. Smith. In the description given of the plague in the LXX. the mention of mice in vi., 4, is preceded by two notices describing a plague of mice in the country (v., 6, vi., 1), and similarly in vi., 45, in the LXX. separate mention is made of the golden *ôphâlm* and the golden mice. But some eminent scholars think that the additions of the LXX. are interpolations of a later hand. There is nothing in the terms used to indicate that 'their land' meant the 'country' as distinguished from the 'city.' Professor Kirkpatrick also suggests that the mention of mice is merely symbolic of the destructive disease attacking the Philistines, since the mouse was the Egyptian symbol of destruction. But he admits the probability that there may have been a destruction of crops by mice. In view of all considerations we venture to submit another interpretation of the reference to mice. May it not be that the mice did not "mar the land" by destroying crops, but by their dead bodies and attendant putrefaction; that they did not constitute a plague, but were killed by one in numbers such as to excite comment? The significance of this comment not being understood by the earlier scribes and translators was wrongly interpreted, and the mistake handed down through subsequent ages.

The now well-known association of great fatality amongst rats and mice in plague epidemics suggests this idea as a feasible one. The association of images of the mice with images of the diseased parts in men induces the inference that they were fellow sufferers; and so golden images were made for both after the manner that in subsequent times the Greeks made "anathemata" or "dora," and the Romans made "donaria" ^{28 29} in similar national or individual extremities and deliverances. Against the idea of destruction of crops there is the fact that there was a harvest to reap in Bethshemish, situated a comparatively short distance off,³⁰ for it is scarcely likely that had the crops in Philistia been destroyed by mice those of the adjoining Bethshemishites would have escaped. However, we do not wish to press the point of the significance of the mice, it has only been mentioned as a matter of interest in relation to the subject.

On the evidence presented, it may be said in brief that the Philistian epidemic presents the usual features of plague. It was widely and rapidly disseminated, of sudden onset, great severity, high fatality, and characterised by buboes and hæmorrhages. The correspondence with other descriptions seems to show clearly and convincingly that the epidemic described in I. Samuel was true bubonic plague.

As to its source, nothing is or can be known, but the location near endemic centres, the great trade routes through, and commercial importance of Philistia were such as might easily have led to its importation. It is not difficult to understand that it would spread, but how is uncertain. Even apart from the superstition of the period, the Ark or some of its draperies, or some of the persons who accompanied it on its journeyings, soldiers returning with spoils of war from the campaign, travellers, etc., may have been the means of conveyance of the infection. But it may have been spread in other ways of which no notice would have been taken at the time, and indeed we cannot even now boast of being informed as to all the ways in which plague is transported from place to place. There is no record as to its termination; the Philistines drop out of the narrative on the restoration of the Ark to Israel. That the disease, though introduced, did not spread amongst the Israelites is not surprising. The Bethshemishites practised, albeit inadvertently, the best possible means of disinfection when they burnt the cart and oxen. Their dread of pollution from a corpse³¹ would render them most careful in

dealing with the bodies, clothing, etc., of those who died. The Ark itself was put into seclusion (isolated) for twenty years at least,³² and was no doubt handled most circumspectly by the men who conveyed it to Kirjath Jearim. These circumstances may have saved the Israelites from the disease, but in any case the end of the plague season was near, and the disease would tend to subside naturally. Its cessation is only what might have been anticipated.

The assigned date of the epidemic, according to the figures made use of by the authorised version is 1141 B.C., and there is every reason for believing that this date is at least approximately accurate. Consequently, there appears to be contained in the few chapters of I. Samuel an account of an epidemic of bubonic plague that occurred over 3,000 years ago, or over 800 years previous to the hitherto accepted earliest record.

Before concluding we may call attention to a still earlier mention of emerods in the Book of Deuteronomy (ch. xxviii., 27), where it is included by Moses amongst the curses for disobedience. The verse reads "The Lord will smite thee with the botch of Egypt, and with the emerods, and with the scab, and with the itch, whereof thou canst not be healed." This language indicates that the "emerods" was a disease already well known in the time of Moses, and that it was a very serious disease, and to be dreaded as bubonic plague has always been dreaded. Hence it is possible, though it cannot be certainly stated, that emerods here also means bubonic plague. If it be so, then the history can be carried back to 4,000 years ago, at which time even it was sufficiently well known to be made use of by Moses as a menace, the nature of which could be understood by the unlearned populace. The disease may have been a familiar one in Egypt before this, and research may yet reveal still earlier records of it. Some of the celebrated "plagues of Egypt" may possibly have been due to the bacillus pestis bubonicus.

However the present paper claims to deal only with the epidemic of 1141 B.C., and to set forth the reasons which indicate that it was bubonic plague. The evidence to this effect is at least as good and valuable as much of that on which the history has been traced to 300 B.C. There is nothing in either case, which can be subjected to the rigid test of observation which alone is certain. Nevertheless, we believe that the conclusion formed is justifiable, feeling with Sir William Gowers that "Where we have no certainty, we must be content with probability, or relinquish all attempts to know."³³

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THE SANATORIUM TREATMENT OF CONSUMPTION.

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READ BEFORE THE PUBLIC HEALTH SECTION,
INTERCOLONIAL MEDICAL CONGRESS, BRISBANE,
SEPTEMBER, 1899.

IN a paper to be read before the Medical Congress, it is impossible to go fully into the details of the advantages to be gained by the treatment of phthisis in special sanatoria. The time at my disposal will not admit of such a discussion, so I propose to assume that you are all agreed upon the benefits to be derived from such institutions, and therefore I will limit myself to a description of the various methods of treatment employed in well known sanatoria for consumptives in the Northern Hemisphere.

The subject is a large one, and is becoming more important every day.

The attention of the public has been aroused, and it becomes our duty as a profession to enlighten consumptives and their friends how to stay the ravages of the most deadly disease of modern times. Few of us but have seen the hectic flush come into the cheeks of our nearest and dearest ones, the gradual wasting of the strong athlete doomed to an early grave, and the breadwinner cut off in the prime of life by a disease which we now look upon as curable. The words of Sir Samuel Wilks (*Practitioner*, June, 1898): "The only remedies I know for consumption are air and sunshine—AIR, AIR, FRESH AIR," ring in our ears, and find a ready

response in the movement to found Consumptive Homes in the Australian Colonies. Germany, Switzerland, France, Austria, Norway, Russia, the United States of America, and other countries have now their sanatoria, and recently such institutions have been established in England with good results. Why then should Australia, with all its natural advantages, delay in developing its plans for the rescue of the consumptive from slow and often early death?

Since Brehmer founded his celebrated sanatorium at Goerbersdorf over forty years ago, our knowledge of the dread disease has extended considerably. The bacillus tuberculosis, then unknown, is now daily searched for in the sputa of thousands of persons, and thus timely warning of the onset of this terrible disease is given us, when means may be taken to eradicate the bacillus and to cure its ravages. Forty years ago we did not study bacteriology or antiseptics; now they are our mainstay in everyday practice.

It is impossible here to follow the treatment adopted in all the important sanatoria for consumptives throughout the world, so I will content myself with bringing before you that of a few of the best known institutions of Europe and America.

The institutions I propose to deal with specially, are the Adirondacks Sanitarium. Dr. Turban's at Davos, Falkenstein, Goerbersdorf, Hohenhonnef, Reiboldgrün, Nordrach and St. Blasien.

ADIRONDACKS.

The Adirondacks Cottage Sanitarium was founded by Dr. E. L. Trudeau in 1884. It is situated in a pine forest in the Adirondack Mountains in the State of New York, U.S.A., about a mile and a half from the village of Saranac Lake. It is about twelve to thirteen hours' journey by rail from the City of New York.

According to Dr. S. E. Solly ("Medical Climatology," p. 211), the climate of this region shows the temperature to be low and steady during the entire winter. Much snow falls, and there are many windless, cold, snowy days. Rain and snowstorms are frequent, although they are said to be less severe than on the coast. Snow lasts from the middle of November to the middle of March or April, varying in different seasons. The soil is porous and dries quickly.

The Sanatorium consists of a number of cottages, which accommodate from two to ten persons each, but the average number is four or five. Each patient has his own separate bedroom, opening into a common sitting room,

which in turn communicates with the verandah. This verandah is sheltered from the winds by means of a single glass screen. The partitions between the sleeping and sitting rooms reach but seven feet from the floor, an arrangement which gives the patient the benefit of the entire air space of the cottage, and allows of its being heated by a single fireplace or stove situated in the central sitting room; but the walls which separate the sleeping rooms from each other reach to the ceilings, and are of solid construction (Trudeau, *Practitioner*, February, 1899, p. 134).

Dr. Trudeau considers that the principal aim of the modern sanatorium treatment of tuberculosis (phthisis) is to improve the patient's condition and increase his resistance to the disease by placing him under the most favourable environment obtainable. The main elements of such an environment are an invigorating climate, an open-air life, rest, coupled with the careful regulation of the daily habits and an abundant supply of nutritious food, with the exhibition of such restoratives and tonic measures as may be indicated in each case.

The line of treatment consists in rest out of doors, the patients being well wrapped up when required; constant exposure at all temperatures, and in all weathers. The patient besides being warmly clad, is protected from the wind by glass or wooden screens placed on the exposed side only, enclosures not being allowed. This is the treatment adopted in ordinary cases, but, of course, some feverish cases must of necessity remain indoors at certain times. Abundance of nourishing food is given to the patient. The food consists chiefly of eggs, meats of all kinds, milk, butter, vegetables, cereals and fruit. Three good meals a day, with an extra meal in the evening if desired, are given to all non-febrile patients. Milk is provided at any time that the patients care to take it.

Alcohol is never prescribed in early cases as a part of the treatment.

Drugs are not used except when specially called for. Cod-liver oil, hypophosphites, and arsenic are used; creosote in small doses, only when there are special indications. Tuberculin has been used in a few selected cases.

Dr. Trudeau concludes, as a result of his experience gained during many years in the practical application of sanatorium methods in the treatment of pulmonary phthisis, "Tuberculosis, if detected in its earlier stages, is curable in a large proportion of cases. It is of vital importance, therefore, that the diagnosis be made early. The best results in treating

incipient tuberculosis are obtainable by the open-air treatment, in special sanatoria situated in good climates. The best plan for construction for such sanatoria is the cottage plan or some of its modifications."

FALKENSTEIN.

The well-known Falkenstein Sanatorium was opened in 1876 under the direction of Dr. Dettweiler. It is situated on the southern slopes of the Taunus Mountains, a few miles from the City of Frankfurt. Among forests of beech, oak, and other trees it lies about 1,300 feet above sea-level. The climate, though cold and foggy at times, is free from wind and dust, and there is no sudden fall of temperature at sunset.

The Sanatorium consists of a main building, with two villas connected by means of covered corridors. There are also several small pavilions in the grounds, some of which can be turned away from the wind. The treatment consists in fresh air, rest, and plenty of good nourishing food.

The patients pass their day somewhat in the following manner:—On rising they are rubbed down by an attendant, after which they assemble for breakfast, from 7 to 8 in summer, or 7.30 to 8.30 in winter. Then they lie down on the balcony, wrapped up in shawls and rugs, till ten o'clock, when the second breakfast is served. Then rest again till dinner time (1 p.m.). Again rest in the open air. Supper is served at 7 p.m. After this the patients lie in the open air until about 9.30, when they retire for the night. The early and second breakfasts consist of hot or cold milk, coffee, rolls and butter. Dinner consists of thick nourishing soup, and four or five courses. At four o'clock the patients take milk on the verandah. Supper consists of soup and two courses. At 9 p.m. milk is again served. Consumptives are encouraged to drink large quantities of milk which comes from the dairy in the establishment. Beer, wine and brandy (usually undiluted) are allowed.

The patients are thoroughly overhauled on their arrival at the Sanatorium; they are afterwards examined once a month, but a daily inspection is made by one of the resident medical men. The temperatures are taken four times daily.

GOEBERSDORF.

"Goerbersdorf," said Dr. Weber in his Croonian Lectures on Hygienic and Climatic Treatment of Chronic Pulmonary Phthisis, 1885, "is the cradle of the mountain health resorts and of the hardening open air treatment in

Europe, with a judicious mixture of hydrotherapeutics. Dr. Hermann Brehmer has the merit of having introduced this combination in a systematic manner, coupled with the strict supervision of the patients essential in the hygienic as well as therapeutic management."

Goerbersdorf is a village in the valley of the Steine in Prussian Silesia. In this valley in 1859, Dr. Brehmer opened the establishment which bears his name, and which for thirty years was under his personal supervision. It lies 1,840 feet above the sea level, in a park of 300 acres. The grounds are wooded, and some nine miles of level and graduated walks are laid out. There are also summer houses and seats in the open air for the benefit of those who can take exercise.

The buildings consist of a main structure with a number of smaller isolated villas.

All patients take large quantities of milk, those with gastric complications taking kefir. There are five meals a day at about 7.30, 10.0, 12.30, 4.0, 7.0. Some rest, others take walking exercise in the open air between the meals. Wine is allowed, and occasionally beer, or brandy diluted. Douches or cold frictions are a part of the treatment. Febrile patients take a glass of milk or kefir every hour.

DAVOS.

Dr. Turban's Sanatorium at Davos (founded in 1887) is situated in a valley in the mountains in the Canton des Grisons, in Switzerland, about 5,000 feet above the level of the sea. Dr. Solly describes the climate here in the winter as very cold, with a few hours of sufficient sunshine to allow of sitting out in the sun's rays; but it is usually freezing in the shade, and at night the mercury falls far below the freezing point. The night air, while cold, is dry, and invalids usually sleep with their windows open. Mr. A. W. Waters ("Some Meteorological Conditions of Davos," 1890) gives the mean annual temperature for twenty-one years as 38° F.—spring, 35°, summer, 52°, winter, 23°. There is an absence of wind, fog and dust.

The buildings consist of four villas connected with one another by means of covered passages.

Dr. Jaruntowsky ("Sanatoria for Consumptives") describes the treatment as follows: "The method of treatment follows the lines laid down by Brehmer and Dettweiler. Febrile patients lie down for the most part in bed close to open windows, while the mild cases spend the whole day either walking in the open air or lying about on the terrace. The catering for the patients is very good, and

resembles that of Falkenstein. The *jour medical* of an ordinary patient would be represented somewhat as follows: Early ablutions or cold friction or douche; between 7.30 and 8.30, first breakfast, then a walk on the hills till lunch time (10.30); after lunch a second walk till 11.30; from 11.30 till 1 rest on the terrace; at 1, dinner; after that rest on the terrace till 4; at 4 o'clock, afternoon tea followed by a walk till 6 o'clock; rest from 6 till 7; supper at 7 o'clock; after supper, rest on the terrace again till 10, when everyone retires to bed."

REIBOLDSGRÜN.

Dr. Driver's Sanatorium at Reiboldsgrün, in Saxony, is situated at an altitude of 2,300 feet above sea-level.

It consists of a number of large buildings connected by covered corridors. The treatment is on the lines of that advocated by Brehmer and Dettweiler.

ST. BLASIEN.

This Sanatorium is situated in a well-wooded spot in the Black Forest. The general methods of treatment are similar to those of the other German Sanatoria.

HOHENHONNEF.

The Hohenhonnef Sanatorium is the largest in Germany. It is situated near Honnef, about 774 feet above sea level, and 500 above the Rhine. The climate is mild and sunny, and the grounds, pine wooded chiefly, cover nearly 100 acres.

The institution is a five-storied building, with two wings somewhat after the style of that at Falkenstein. There is a large fresh air gallery which is protected from the wind by glass screens, and which can be cooled in summer by streams of water on the roof. The methods of treatment and the dietary are somewhat similar to those at Falkenstein.

NORDRACH.

Nordrach is situated some 1,500 feet above sea level in the Black Forest, about thirty miles from Strassburg. It is surrounded by forests of pine trees, and comprises about eighty acres of ground. The Sanatorium was established in 1889 by Dr. Otto Walther.

The climate is described (*British Medical Journal*, April 30, 1898) as "variable, with severe frosts, snow, gales of wind occasionally, mists and dull weather in winter, and almost tropical showers and thunderstorms in summer; but there is a large proportion of bright, sunny days throughout the year, and the air is un-

usually still, of course exceedingly pure and fresh, and decidedly humid."

The grounds are laid out in walks, both on the level and graded, with seats at intervals; but no covered walks as in many of the other sanatoria, and few shelter huts. The buildings are detached, and are of two floors.

The treatment adopted is similar to that at other institutions with the exception that the patient, be his malady acute or chronic, febrile or non-febrile, is encouraged to pass his life in the open air.

Dr. Walther's principles of treatment are as follows:—

1. An absolutely open air life for every class of case in all weathers and seasons, by day and by night.

2. A regular course of adequate feeding (often over-feeding from a patient's point of view) with rich and varied diet, including much meat and milk and more fatty and carbo-hydrate food and little alcohol, given in large meals with long intervals.

3. A judicious combination of exercise on the hillsides carefully regulated and carried out, so as always to fall short of dyspnoea and fatigue, and so never to interfere with the healing of the lungs along with the maximum amount of mental and physical rest, forming altogether a gentle training for the lungs and heart.

4. Most important. The co-ordination of all these details, so as to induce regular habits of life in each case by the personal supervision of the physician, and if necessary, the tactful but firm enforcement of the same. (*British Medical Journal*, April 30, 1898).

According to Dr. R. M. Smyth (*British Medical Journal*, April 30, 1898) one of the resident physicians, three meals are given in the day. Breakfast, at 8.30 a.m., consists of coffee, bread and butter, and cold meat, such as ham, tongue, sausage, etc. Dinner, at 1 p.m., consists of two hot courses of meat, or fish and meat served by the doctor to each patient according to his individual wants, with an abundance of potatoes and green vegetables and sauces, of which butter is a main ingredient; the third course may be pastry, farinaceous pudding, fruit or ice-cream, with coffee. Supper, at 7 p.m., is usually one hot course as at dinner, and one cold as at breakfast, with tea. At each meal the patient has half a litre of milk, as soon as possible reduced to a quarter litre, or stopped altogether, according to his capacity and need for putting on flesh.

The two latter meals present no option in the matter of diet; all are taken under the doctor's supervision, and servants may not take

away the plates until everything has been eaten, or the doctor has given permission. Fever cases in bed have the same diet, with, if anything, slightly larger portions. Patients always rest in their couches from 12 midday to 1 p.m., and from 6 to 7 p.m. before meals. On this plan everyone gains weight, often 2, 3, and even 4 lbs. a week for the first few weeks, afterwards gaining by smaller increments. It sometimes happens that patients are sick during or shortly after a meal; if this happens they come back and finish, usually finding no difficulty with the remainder. The rest before meals, and the long intervals between, aid complete assimilation very much; and dyspepsia is on the whole by no means common, disappearing as nutrition and strength improve.

THE LEADING FEATURES OF SANATORIA.

From the foregoing descriptions of some of the world-famed sanatoria for consumptives, we find that they possess many features in common.

They are mostly situated in valleys, among hills, and in districts where the native inhabitants are relatively immune to tuberculosis. Away from large towns or frequented public roads, they are free from impurities, organic or inorganic, in the atmosphere. The climate is fresh and bracing, and the air comparatively dry. The patients are for the most part well protected against cold or wind, while there is sufficient fine weather to allow of almost continuous exposure out of doors. The soil is well drained and dry. The buildings are well ventilated, with open balconies and sheltered verandahs, and the institutions are under the immediate supervision of medical men.

The area of the grounds varies from 14 acres at Falkenstein to 300 at Goerbersdorf. Reiboldsgrün has 190 acres, Hohenhonnef 100, Nordrach 80, Adirondacks 45, Davos (Turban's) 17. A large area of ground is a decided advantage. Shaded, graduated and level walks, open-air shelters, etc., are a necessity.

In some of these institutions prolonged rest, in others active exercise are the main features. We cannot, I fear, say that all consumptives would be benefited by either the one or the other exclusively.

The diet is liberal in all. Milk is the most important article of food. In some homes the patient must take food at short and regular intervals throughout the day; at others fewer but larger meals are given.

Drugs are used sparingly in ordinary treatment. Cod-liver oil, hypophosphites and creosote are prescribed when specially indicated.

Alcohol is given freely in some, and is forbidden in others. As a general rule it is allowed in some form or another.

RESULTS.

There is no doubt that the sanatorium treatment of consumption can, on the whole show excellent results.

At Dr. Brehmer's Sanatorium at Goerbersdorf 5,440 patients were treated during the period 1876-86. Of these no detailed reports are available in 408, leaving 5,032 which may be tabulated according to Dr. Brehmer's notes as follows:—

Stage of Disease	Number.	Per Cent.	Cured.	Per Cent.	Nearly Cured.	Per Cent.	Total.	Per Cent.
I.	1,390	27.62	387	27.8	430	31.0	817	58.8
II.	2,225	44.21	152	6.83	325	14.6	477	21.43
III.	1,517	28.17	12	0.84	33	2.3	45	3.14
	5,032	—	551	11.00	788	15.6	1,339	26.6

In 1890 special inquiries were made in order to ascertain how long the cure lasted in the case of those discharged from the institution as cured, or nearly cured. The results showed that in five cases the cure had lasted for 20 to 29 years, in 52 cases from 12 to 21 years, in 38 cases from 7 to 12 years.

At the Falkenstein Sanatorium 132 out of 1,022 patients were discharged as cured, 13.2 per cent.; 110 as nearly cured, 11.0 per cent.; giving a total of 242, 24.2 per cent.

In Dr. Haufe's Sanatorium at St. Blasien corresponding inquiries into the fate of 324 patients who had been treated in the Sanatorium during the years 1878 to 1889 showed that, of 288 about whom information could be obtained, 72 were living in good health from 3 to 12 years later, 201 had suffered more or less from pulmonary catarrh from 2 to 12 years, without, however, having to suspend their ordinary business; in 12 cases the health got worse, and 5 patients had died.

The statistics from Reiboldsgrün (Driver's) gave the following results of 2,000 cases: Cured, 13.66 per cent.; materially improved, 28.02 per cent.; improved, 28.60 per cent.; unimproved, 25.20 per cent.; and 4.52 per cent. died.*

At Hohenhonnef the absolute cures are said to be 14.5 per cent., and relative cures 28.9 per cent. At Davos (Turban's) the results show 40 per cent. of cured and 40 per cent. improved. At Nordrach the cures amount to 30 per cent. and the improved cases 65 per cent.†

* For the above figures I am indebted to Dr. von Jaruntowsky's work, "Sanatoria for Consumptives."

† Knopf, "Prophylaxis and Treatment of Pulmonary Consumption," Philadelphia, 1899.

The results at the Adirondack Sanitarium are given by Dr. Trudeau* in the following table. They are for 203 patients, who remained an average of nine months during the period 1897-98.

Condition of patients when admitted.	Apparently cured	Disease arrested.	Improved.	Unimproved or failed.	Died.
75 incipient cases	55	16	2	2	0
84 advanced cases	15	38	19	11	1
44 far advanced cases	0	7	19	13	5
203 cases Total 70	61	40	26	6	

Dr. Trudeau defines "incipient" as cases in which both the physical and rational signs point to but slight local and constitutional involvement: "Advanced" cases, in which the localised disease process is either extensive or in an advanced stage, or where, with a comparatively slight amount of pulmonary involvement, the rational signs point to grave constitutional impairment, or to some complication. "Far advanced" cases, those in which both the rational and physical signs warrant the term. "Apparently cured" cases, in which the rational signs of phthisis and the bacilli in the expectoration have been absent for at least three months, or who have no expectoration at all, any abnormal physical signs remaining being interpreted as indicative of a healed lesion. "Arrested" cases, in which cough, expectoration and bacilli are still present, but in which all constitutional disturbance has disappeared for several months, the physical signs being interpreted as indicative of a retrogressive or arrested process.

CONCLUSION.

"It is the duty of mankind to overcome tuberculosis just as scurvy has been overcome," said Virchow fifty years ago, and there is much food for reflection in these words. Is not the open-air treatment worthy of serious trial in Australia? This treatment is not new, for eighteen centuries ago Celsus advised consumptives to "take a cow, go into the mountains, live on the milk, and be in the open air."

Can we not in most of our colonies find suitable sites for the erection of homes for consumptives? Great tracts of land, accessible to the large cities and towns, are available, where the air is fresh, dry, and free from pathogenic organisms, where exercise can be taken or rest secured in the open air, and where the soil is dry and well drained.

I cannot take up the time of this meeting in dealing any further with the methods of treatment which I advocate, but if I have by means of this paper aroused interest in the movement going on in the various Australasian colonies for the establishment of homes and hospitals for phthisical patients, I shall feel amply rewarded for the time and trouble which I have expended on the subject.

THE SCOPE AND OPERATIONS OF THE PROPOSED ANTI-TUBERCULOSIS ASSOCIATION.

By J. W. SPRINGTHORPE, M.A., M.D. MELB.,
M.R.C.P. LOND.

READ BEFORE THE MEDICAL PROFESSION OF
VICTORIA, JULY 27TH, 1899.

I HIGHLY appreciate the honour of making, before this representative gathering, a preliminary statement of the scope and operations of the proposed Association. The time, indeed, is ripe for a general advance. Koch's discovery of the bacillus, the world-wide experiments with tuberculin, the final recognition of the limitation of the bacillus by the constitutional vulnerability, the establishment of the remedial value of climate, diet, and hygiene, the success of the open-air treatment—and its logical outcome the sanatoria—investigated and determined, as they have been, by Medical Congresses and Royal Commissions, have naturally culminated in a world-wide movement, exemplified in England, in the formation of a National Association for the Prevention of Tuberculosis, and in Germany, in the recent International Congress for "the fight against tuberculosis as a national disease."

It is in such an international contest that we now propose to take part. Nor is the campaign one for which we have not made some local preparation. Since 1887 our local Health Society has almost annually included the prevention of consumption amongst its course of public lectures; in 1891 it secured instruction in hygiene as part of the State curriculum, and in 1895 it issued a Wall-street, which was spread broadcast, and authoritatively recommended for routine adoption by the Australasian medical profession. This initiative has been ably seconded, and extended by the publications and actions of the Board of Public Health. For years past also we have had a winter sanatorium open at Echuca, and more recently a summer one at Mount Macedon. And at Victorian suggestion, the Australasian

* Practitioner, February, 1899.

Association for the Advancement of Science at Brisbane in 1895 drew federal attention to the need of skilled inspection against tuberculous meat and milk; and, at Dunedin in 1896, our Intercolonial Medical Congress similarly dealt with the whole question in a thorough and practical manner. We are now invited to go further, and join, as a profession, in what promises to be one of the greatest movements of our time.

The plan of campaign open to such an Association as that which is now proposed, seems to fall naturally under three heads:—

I. First and foremost comes that public education, which is ever the basis of permanent advance. We must pound away at the public mind, until it accepts as axiomatic truths, facts such as these, viz., that it is the unhealthy that contract consumption; that the susceptibility is oftener acquired than inherited, and that it comes from ill-ventilated rooms, dark, damp, dirty houses, intemperance, insufficient food, catarrh, and many diseases; that it is most to be feared between 15 and 30 years of age; that it can generally be prevented, and often cured; that early treatment is all important; that the germ enters with tuberculous milk and infected air; and that the milk of tuberculous cows and the air from dried tubercular sputum are mainly responsible for its spread to others.

But an infinity of effort is needed for the establishment of these general truths; and that effort must be directed along many channels, such as the following:—

- (a) Teach the laws of hygiene, not only in State schools but in all higher schools and colleges; and extend the Health Society's system of granting Certificates in Health to all who pass stated examinations.
- (b) Add the prestige of the proposed Association, to some such Wall-street, as that of the Health Society (already approved by the Dunedin Congress) and to the Certificate of Purity of Milk, which that Society proposes to issue.
- (c) Organise, in conjunction with the Health Society, special lectures in different centres of population; and form local branches of the Association, to spread its principles and contribute to its funds.

Thus "the gospel of the open window," the value of scalding the milk, the importance of healthy surroundings, the dangers in the sputum, must be brought home to all householders; and the consumptive come to recognise that he may re-infect himself, and give the

disease to others, by allowing his sputum to dry upon handkerchiefs, floors, and the like; and that neglect in this particular is often a fatal mistake, and should always be regarded as a serious crime.

- (d) Teach trades, clubs, and workingmen generally, that the heavy drain made by consumption on their lives and pockets is largely preventable; and secure their co-operation, by showing that early treatment means the saving of twenty-five per cent. of the lives, and that one patient's recovery will pay for the sanatorium treatment of four others.
- (e) Prove conclusively to municipal authorities, that the disease depends upon insanitariness and infection; that drainage and surface conservancy have an enormous preventive value; that special danger lurks in infected milk, dust, sputum, and houses; and reiterate the proof, until the milk and food supplies are properly regulated, and public places made sanitary.
- (f) Give the Health Authorities and the Government no peace, until some regulation is exercised over the immigration of advanced cases of tubercular disease; dairy stock tested with tuberculin, and inspected by competent veterinary surgeons; sputum examined free of charge in a public laboratory; infected dwellings thoroughly disinfected before re-use; the present permissive and educational powers of the Board of Public Health rendered more mandatory and executive; and steps taken in the direction of the notification of phthisis as an infectious disease.

Such is the public task before us. To be accomplished we shall need at least a permanent representative committee, a paid secretary, a journal, and an enthusiastic organisation.

II. The second great requirement, naturally bound up in the foregoing, is the co-operation of the profession. It is the distinctive glory of the medical profession, that both the initiation, and the performance of public works like the present, are universally recognised as pre-eminently ours. And surely nowhere is our help more needed, than in this fight against the greatest danger to our race. But to be successful our co-operation must be hearty, enlightened, and sustained, our methods organised, and our attack universal.

And, though this meeting is proof of our desires and aspirations, yet truth compels the statement, that there is almost as much need for

reform within the profession, as there is need for activity without. How many of us, for example, still rely upon drugs and ignore special feeding, free ventilation, and suitable climate? How many never see to the destruction of the sputum, the purity of the milk, the disinfection of infected places? How many disregard the recommendations of the Dunedin Congress as to the use of a Table of Advice and Information in their routine treatment of cases? and forget practically all about the unsuitability of the coastal regions for almost all stages? How few ever examine the sputum for early detection of suspected cases! How fewer still, despite the advice of Whittaker at Montreal, Sims Woodhead in London, and Brieger at Berlin, ever think of settling the diagnosis with tuberculin, before the disease is otherwise apparent? And yet it is not too much to say that most of the success or failure of this national attempt must stand or fall with the manner and extent to which the profession applies these essential safeguards, in private, club, and hospital practice. Only when practice and preaching go hand-in-hand, will our determination to check this great human scourge prove irresistible. But when so allied, the death-knell is rung of the predominance, even the prevalence of tuberculosis amongst the diseases of mankind.

III. There remains still the best treatment of the cases themselves.

Primarily, of course, this must include the inculcation into the patient himself, of the same principles of vulnerability and infectivity, that have been graven deep into the public mind. In addition, the patient must be taught to avail himself of the best climatic and dietetic assistance at the earliest possible moment, and from the very outset to cease being a source of danger to himself, and a menace to the health of others. And what of the treatment to be adopted, when he does actually appear before us? Surely we must discard the old shibboleth of a cure by drugs, and put on one side the modern dream of conferring immunity by means of some specific; and urge, instead, upon his acceptance the open-air treatment in a suitable climate, supported by scientific diet, and all the therapeutic aids that the case may require. Such, indeed, is the direction in which, after long and devious experimentation, Germany has now the honour of leading the civilised world.

The system there adopted may be epitomised as follows:—All advanced cases, and those deemed insusceptible of improvement, are

handed over to ordinary hospital treatment, and treated in separate blocks or buildings erected for their use. The wealthier classes have the opportunity of entering one or other of the private sanatoria, whose names and success are now everywhere recognised. The early and limited cases amongst the poorer classes, after being passed as suitable by special physicians, are admitted into public sanatoria, suitably placed from residential and climatic points of view, and there treated for a few months, after which the majority are so far improved or cured that they can return home, and, if necessary, there practice the routine which they have experienced in the sanatorium. The sanatoria themselves are built by a combination of private, municipal, and Government subscriptions, and are under a management representative of all interests concerned. The patients, or the friendly society of which they are members, pay a small fee, and there is a constant inflow of funds in connection with the system in vogue of the compulsory insurance of the working classes.

How far, and in what way, can we follow this good example? Climatically, we have in Australia, many places of recognised value in the treatment of phthisis; and most of the colonies have already one or more resorts of the sanatorium type. But many questions of local climatology remain only partially answered, our efforts have been sporadic and confined to isolated instances: we have been without common meeting-ground, and so far touched only the fringe of this great subject. And though, in some respects, the settlement is a matter of federal concern, perhaps the following may be advanced as the skeleton of a Victorian scheme:—

- (1) Appoint a sub-committee to bring forward something scientifically valuable as to the climatology of the different parts of our different colonies.
- (2) Leave the question of sanatoria for the well-to-do, to private and federal enterprise.
- (3) Leave advanced cases to private and hospital treatment, always emphasising the safeguards against the spread of infection.
- (4) Secure the co-operation of the working classes, clubs, trades, hospitals, profession, municipal authorities, Government, and charitable people generally; and concentrate effort upon the establishment of public sanatoria for the use of the working classes. Let expert advice select the most suitable sites and

regulate the admission of patients, but let the general board of management be representative of all the interests concerned.

- (5) Let the sources of revenue include the following:—(a) A proportion of the annual charitable vote; (b) charitable subscriptions; (c) the subscriptions of the members of the association; (d) small payments from patients, or clubs, etc., to which they belong; (e) a Government capitation fee in the case of paupers, their cases being investigated by a Government official; (f) reciprocal arrangements with other colonies and Governments, so that pauper patients shall become chargeable to their respective colonies and places.

Such seem to me to be the links in the chain, which we are now asked to unite in weaving against invasion by tuberculosis. And as the strength of a chain depends upon the integrity of its different links, we fail of the security that might be ours, in proportion as we leave one or other of these triple strands weak or ineffective. It is no hyperbole to say that there is probably no object more worthy of individual, national, and even international support, than this fight against tuberculosis. And though it would be Utopian to expect anything like its extinction, even by the best combination of all our available forces, yet it is quite within our powers, by this Association, to do for others an incalculable amount of good, and to gain for ourselves, not only an increased measure of immunity, but the satisfaction of having aided a unique philanthropic effort.

I have much pleasure, therefore, in moving,—“That the following be appointed a Committee (with power to add to their number) to carry these resolutions (*re* the formation of an Association and its inauguration at a public meeting in the Melbourne Town Hall) into effect:—Sir T. N. Fitzgerald, Professor Allen, Dr. Argyle, Dr. Bage, Dr. Branson, Dr. Daish, Mr. Gault, Dr. Gresswell, Mr. Kent-Hughes, Dr. Jamieson, Mr. A. L. Kenny, Dr. Maudsley, Dr. McAdam, Dr. Murray-Morton, Dr. Springthorpe, Dr. Stawell, Mr. G. A. Syme, Dr. Turner and Dr. J. Williams.”

We are very pleased to hear that at the Health Exhibition held at Southampton during the present year, Messrs. Burroughs Wellcome and Co. secured the highest award (silver medal) for their “Soloid” disinfectants.

HOW TO RECOGNISE LEAD-POISONING IN CHILDREN.

BY A. JEFFERIS TURNER, M.D. LOND.,
BRISBANE.

CASES of chronic lead-poisoning in children are occasionally met with over a large area of Queensland and New South Wales; possibly, also, of other colonies. They frequently pass under medical observation without being recognised. This is partly due to the fact that the symptoms of this condition in childhood differ in some details from those met with in adults, on which the text-book descriptions appear to be exclusively based. Partly, also, to the fact that many cases (but certainly not all) are obscure, and difficult to diagnose. It has appeared to me, therefore, that the following notes, based on a rather large personal experience, might prove useful.

The discovery of lead in the urine is a task only to be undertaken by the expert chemist.* When found, it is of the highest value in confirming the diagnosis. But lead appears to be only *occasionally* present in the urine of these cases, and then only, as a rule, in extremely minute proportion. Hence a negative result of a single or even several chemical examinations does not necessarily invalidate the diagnosis of any individual case. Of course, when a series of cases occur, lead ought to be found in the urine of *some* of them.

DISCOLORATION OF THE GUMS.

When the teeth are foul, and decomposing matter collects in the sulci between the teeth and the gum in a patient whose blood contains traces of lead, the sulphide of this metal is deposited inside the gum at its extreme edge. This constitutes the so-called “blue line,” a name which is very apt to mislead. A well-marked line, such as would attract cursory observation, is very rare in children. The discoloration commences as minute blackish dots, in many cases scarcely distinguishable without the aid of a lens, and *only opposite certain teeth*. One tooth only may be affected, more often several teeth, but seldom more than a few. This appearance is of very high diagnostic value, and I believe it to be quite distinctive, although I have sometimes found it difficult to get others to recognise it as abnormal, even when it has been pointed out to them. It may be however the only indication of the presence of lead in the system, as was pointed out to me

* It is absolutely necessary, among other things, that the reagents used be found by testing to be free from all traces of the metal.

some time ago by Dr. H. T. S. Bell, a former resident at the Childrens' Hospital, who recognised it in healthy children of families in which cases showing symptoms of lead-poisoning had occurred.

When necrosis of the jaw, or suppuration about the root of a tooth is present in a case of lead-poisoning, there may be extensive blackish discoloration, not only of the gums, but of the mucous membrane of the inner surface of the lips. These are the only cases in which I have found the discoloration conspicuous.

It is important to remember that there may be no trace of discoloration of the edges of the gums in perfectly typical cases, and that in children this is a frequent occurrence. The absence of any changes in the gums is of no value whatever in negating a diagnosis of lead-poisoning. This diagnosis must then rest on the clinical examination of the patient's symptoms, and these are so variable that I have divided them into four groups. It must be understood that a case may exhibit symptoms under one of these groups only, but may also show symptoms coming under several groups.

PARALYSES.

I take these symptoms first as being the most easily recognised. The first paralytic symptom is dropping of the toes during walking. When this becomes well marked the child adopts a high-stepping gait to raise its toes from the ground. The muscles paralysed are the tibialis anticus and the extensor longus digitorum. Less commonly the peronei are paralysed. When the paralysis is of long standing there is a secondary contracture of the calf muscles causing talipes equinus.

In some of these cases the arms become also affected, causing wrist-drop. The digital extensors are first affected, the carpal extensors usually escape.* The supinator longus is not affected. Unlike what is the rule in adults, *wrist-drop is not the most common paralysis from lead in childhood.* In those cases in which both wrist-drop and foot-drop occur, the feet have been invariably in my experience the first to suffer, and the last to recover.

In severe cases there is paresis and wasting of the small muscles of the thumb, especially the abductor, opponens, and flexor brevis, less commonly of the adductor pollicis and interossei.

It is hardly necessary to say that the paralyzes are bilateral. They have been confined in my experience to the groups of muscles mentioned above with one rare exception, for in a

very few cases I have observed paralysis of the diaphragm.

COLIC AND MUSCULAR PAINS.

Attacks of colic are not uncommon, but do not present such a typical aspect as, judging from published descriptions, they do in the adult. During the attack there is usually constipation, but this is not invariable. Sometimes it is accompanied by vomiting. The most characteristic feature of the attacks is their periodicity. A not uncommon history is that the child suffers from "bilious attacks" every month or six weeks, being perfectly well in the intervals. These "bilious attacks" will be found, on questioning, to consist of abdominal pain, and vomiting, usually accompanied by constipation.

Pains in the limbs, especially in the legs, are a common and very characteristic symptom. They keep the child awake at night, crying and asking to have his legs rubbed. They may accompany the abdominal attacks, and, like them, tend to periodicity; and are characteristic of the period before paralyzes develop.

The more severe attacks of pain are accompanied by obvious cramp, particularly of the calf-muscles. In the worst cases there is even opisthotonus, the erectores spinæ being in a state of cramp. These attacks are very painful.

ECLAMPTIC CONDITIONS.

Eclampsia may occur in the early or the late stages. The attacks present nothing peculiar except that they are usually severe, and not infrequently fatal. The diagnosis, in the absence of a good clinical history, may be impossible except by chemical analysis of the urine; but careful questioning may often elicit the fact that the child had previously suffered from periodical attacks of pain in the abdomen and legs.

OCULAR NEURITIS, SPURIOUS MENINGITIS.

A typical case presents the following combination of symptoms:—The child is brought because it complains of headache, perhaps accompanied by vomiting. It is observed to have a slight squint, which is found to depend on paresis of one, or perhaps both external recti. Optic neuritis, often intense, is found to be present. In such a case the first diagnosis to be considered is lead-poisoning; the prognosis is favourable as regards life, but doubtful as regards vision. The majority, under hospital treatment, recover completely, but in not a few optic atrophy and blindness have ensued.

In a minority of cases other ocular muscles are involved in addition to the external recti,

* Extension of the wrist is performed by the carpal extensors only when the fingers are clenched. (See Gower's "Diseases of the Nervous System," Vol. II., p. 871.)

and in these cases the prognosis as regards vision is very unfavourable.

In the more severe cases there may be intense mental irritability, retraction of the head, rapid wasting, or rarely, convulsions. These cases are usually diagnosed as meningitis, but notwithstanding, they frequently recover, though often with loss of vision.

The milder cases are more likely to be regarded as cases of cerebral tumour until their favourable course renders this diagnosis untenable.

For fuller details I must refer the reader to papers by myself and others in the *Australasian Medical Gazette*, October, 1897, and the transactions of the Intercolonial Medical Congress, Sydney, 1892.

POST-MORTEM NOTES ON A CASE OF STRYCHNINE POISONING.

By A. E. MARTIN, M.D., F.R.C.S., BALLARAT, VIC.

I FEEL that some apology is necessary for troubling this Branch with simply the notes of a *post-mortem* examination, but my apology must lie in the fact of the rarity of cases of such notes in cases of strychnine poisoning, and in the fact that although not common such a case may happen to any one of us at any time.

On April 26th I was asked to examine the body of a young man, aged 22 years. He had been found dead in bed at about six that morning, and was last seen alive at 11.15 p.m. the previous day. His previous health so far as was known had been good, and he had spent the last evening alive at a meeting of friends lasting from eight till shortly after nine. He then went for a walk with one or two friends, had quinine and schnapps to drink at two public houses, and lastly coffee and saveloy at a stall. He then began to smoke a cigar, went home accompanied by another young man, who remained with him for about 15 minutes. Deceased then complained of feeling sick, saw his friend out of the house at 11.15, went back to his room and was never seen alive again.

The body was very well nourished. *Post-mortem* rigidity very well marked. There was general *post-mortem* lividity, but no sign of any bruising except a small wound on the skin which had no bearing on his death. This *post-mortem* lividity was peculiar in not being limited to the dependent parts, but more or less general all over the body. The attitude of the arms was also peculiar. Instead of having dropped down in the usual way the forearms

were pointed nearly upwards. The mouth was closely shut, and the features were natural.

On opening the body and examining the organs one by one I found them all sound, and could detect no sufficient cause of death.

The brain was normal, not in the least congested; if deviating at all from the normal, slightly anæmic. The lungs were healthy, though dark and congested. The larynx and air tube were free from any foreign body.

The heart was perfectly healthy; weight, 12 oz. Muscle firm and without signs of fatty degeneration. Valves acted perfectly. Ventricles firmly contracted. The blood in the larger vessels was fluid and dark.

The liver was normal. Also the spleen (9 oz.) and the kidneys (rather more than 12 oz.). The bladder was contracted and empty.

The intestines, from the stomach to the rectum, were slightly more congested than usual, the upper end of the duodenum being particularly so. This latter was almost sufficient to suggest the presence of some irritant poison. The small intestines were irregularly contracted, i.e., for a length of about a yard or so the diameter would be about that of the index finger, then for several yards it was distended with gas, and then again contracted, and so on. The contents of the intestine were of normal character throughout, and the rectum was full.

With regard to the stomach and its contents, I can say nothing more than that the stomach was only partially full. No other cause of death being found present, I thought it desirable that the contents of the stomach should be analysed, so I handed the stomach and contents to the police for that purpose.

The only deviation from the normal was the general congestion of the internal organs (brain excepted), together with the curious irregular contraction of the small intestine.

I had now to make up my mind as to the cause of death. The healthy organs appeared to put natural death out of the question. The general congestion of the internal organs with the dark fluid blood pointed to suffocation, but no cause of suffocation could be found. Nor were there any wounds or marks to suggest external violence. I therefore thought of poisoning. At first ptomaines in the saveloy suggested itself, but the death was altogether too rapid for that. It was necessary to think of a rapid poison, and, if possible, one that would account for the general congestion of the internal organs—for the appearance of suffocation, in short. Strychnine was the most likely poison for that. It is rapid, it causes

prolonged contraction of muscles, and in causing this of the respiratory muscles would cause suffocation. It further accounted for the irregular contractions of the small intestines, and also for the curious way in which the forearms were pointing upwards though quite unsupported. They had, I suppose, remained in the position in which they were when the last spasm occurred. Putting all these facts together, I came to the conclusion that the most likely cause of death was poisoning by strychnine, a conclusion that was subsequently proved to be correct by the report of the government analyst.

To make the case complete, I may say that the manner in which the poison was taken remains unknown. Nothing was found in his room which gave any clue to the source. My own opinion is that it was taken during the evening while he was with his friends, and that his complaint that he did not feel well at 11.15 marked the onset of the first symptoms. For three hours and a quarter he was with friends, and I do not think the poison was taken before that or symptoms would have shown themselves earlier. All he took during that three hours and a quarter was seen by his friends. What these things were I have mentioned, but no light can be thrown upon which, if any, contained the poison. The quinine bottle from one public house was secured by the police and its contents analysed, but the other bottle was unobtainable. Nothing was found in the one. No traces of poison were found in the bedroom.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 27th October, at 8.15 p.m.

Business:—General.

G. T. HANKINS, Hon. Secretary.

WAR MAP OF SOUTH AFRICA.—We are in receipt of a war map of South Africa, printed in four colours. All the principal divisions are shown, and also strategical points, railway routes, rivers, and ground plans of Pretoria, Durban, Johannesburg, and Pietermaritzburg. The map will be found indispensable for following the various movements of the armies, and supplies a want which has been felt by all who have desired to fix localities and find names. The price at which this valuable work is published, 1s. 1d. post free, should ensure a ready sale. The publishers are the New South Wales Bookstall Co., 861 George-street, Sydney, and the map is printed by John Sands.

RADIOGRAPH SHOWING BULLET IN PELVIS.

BY LAURENCE H. L. HARRIS, M.B., CH.M.,
SENIOR RESIDENT MEDICAL OFFICER
SYDNEY HOSPITAL.

E.A., *æt.* 30, a dressmaker by occupation, was admitted to the Sydney Hospital under the care of Dr. W. H. Goode, on the evening of August 16th, suffering from severe shock as the result of an encounter she had had with a man about half an hour previously, during which she had been shot in several places. On examination, a wound was found situated just to the left of the spinal column in the mid-dorsal region, and the bullet which had produced this was found in front in the left nipple line. This was easily removed after a previous injection of cocaine. (This bullet, it will thus be seen, followed the course of the rib it struck, instead of entering the chest cavity direct).

A second bullet had passed through the left thigh, as the wounds of entrance and exit were both well defined, and a probe placed in each wound pointed in the same direction. Then a third wound was found on the outer side of the right thigh, just below the great trochanter; no other wound was present. Next morning it was decided to take a radiograph for the purpose of localising this third bullet. The patient thought she felt it lower down her thigh, but palpation revealed nothing, nor did the probe lend any assistance, for a certain amount of lymph had already been thrown out, and this naturally increased the difficulty of probing.

The first plate used was rather small, and the bullet was revealed just near its edge. A second plate, size 10 x 12 inches, was then used with a better result, but unfortunately the weight of the patient broke the plate, so a third one was exposed, and the result is depicted in the accompanying illustration. It will be seen that the bullet is touching the sacrum, which had evidently formed a barrier to its further progress, indicating, from the position of the wound, that its course must have been backwards and inwards across the great sacro-sciatic notch, to the side of the sacrum.

The remarkable part is the form which the bullet presents, having somewhat a "caterpillar" appearance, though originally the shape of an ordinary .380 bullet. Naturally, the

bony protuberances encountered during its course are sufficient to account for this. A probe was placed over the middle line for localising purposes. The remainder of the radiograph calls for no further explanation. The patient has since left hospital, and she has so far recovered from her injuries, and feels so little inconvenience from the presence of this

bullet, that it has been decided not to search for it.

The original radiograph was taken on a 10 x 12 inch plate—a Marion Ordinary—placed in an accelerating screen, the tube being eight inches above the body, and the exposure occupying twenty minutes with an eight-inch Apps' Coil.

SOME ORIGINAL SURGICAL WORK.

By H. M. O'HARA, F.R.C.S.I., SURGEON TO
THE ALFRED HOSPITAL, MELBOURNE.

CASE I.

Anything new in surgical technique nowadays must be interesting; anything which can simplify your work must be of advantage to you. Hence my reason for bringing some original work under your notice.

In a recent issue of the *A. M. Gazette* you will have read a description of my method of closing the peritoneum, so that to-night I shall merely give you a demonstration. The advantages which I claim are—

Firstly. Simplicity and rapidity of performance.

Secondly. The formation of a stronger wall to resist post-anæsthesial vomiting, and the prevention of hernia later on.

Thirdly. The absolute barrier to any leakage from the external muscular parts of either blood or pus should superficial suppuration unfortunately occur.

Fourthly. The fact that a sponge can be left in the abdomen until the moment of closure—a no small advantage should the patient be vomiting.

Fifthly. The certainty with which the intestine and omentum are kept in the abdomen. Many cases have been reported where intestine has forced itself between sutures and become strangulated.

Sixthly. The avoidance of any subsequent adhesions between peritoneum and intestine, for by this method there is no raw surface of peritoneum in contact with intestine, all the cut surfaces being puckered together external to the abdominal cavity under the muscles to which they become adherent, forming a strong wall in the line of incision.

CASE II.—VESICO VAGINAL FISTULA.

In the operation for vesico vaginal fistula, the surgeon cannot avail himself of much outside help. The field of operation is so limited that a second pair of hands are only in the way; so that with the exception of a retractor holder he must do everything himself.

To minimise this difficulty, I have adopted the following plan:—

The patient is placed in the lithotomy position, the legs fixed with Clover's Crutch, and the buttocks brought down to the end of the table. The first step is to gradually dilate the urethra until the first finger of the left

hand can be introduced into the bladder and present at the fistula. The edges are now pared, and the sutures introduced through all but the mucous lining of the bladder. The finger in the bladder keeps the parts tense and protrudes it towards the vaginal outlet, and the second finger and thumb of this hand can be utilised in tying the stitches. My friend, Dr. Cuscaden, can endorse the ease with which this method can be carried out in the most formidable cases. The urethra soon regains its normal condition and within a week has resumed its contractility.

CASE III.—EXCISION OF THE TONGUE.

To remove the tongue by a practically bloodless operation appears to me to be of the first importance. Profuse hæmorrhage may so exhaust the patient that he dies of shock, or the suction of a quantity of blood into the air passages may result in pneumonia. In any case, much hæmorrhage necessarily retards convalescence.

I think the following plan will commend itself to you as an easy and safe operation, which, with ordinary care, can be made almost bloodless:—

The tip of the tongue having been transfixed, and a stout silk ligature passed through it, is drawn well forward. The attachments to the floor of the mouth are freely divided, and all bleeding points stopped. The anterior pillars of the fauces are now seized with long narrow forceps, and divided near the tongue. The mucous membrane can be separated with the fingers. Traction will now pull the loosened tongue well forward. With the first finger of the left hand in the mouth, the attachments of the tongue by the hyoglossus and genio-hyoglossi can be felt to the hyoid bone. A long semi-blunt needle (an ovarian pedicle needle answers very well) carrying a stout silk ligature is passed from without at a point close to the great cornua of the hyoid bone, and is guided along the side of the root of the tongue by the finger in the mouth. This needle is now withdrawn, leaving the loop over the finger in the mouth. The needle is again threaded, and similarly introduced on the opposite side, and the second ligature is passed through the loop in the first. This is then withdrawn, and the second ligature is thus made to encircle the root of the tongue. An assistant now compresses the lingual arteries by tightening this tourniquet, and the tongue can be split according to Whitehead's method, and one half cut away. By relaxing the ligature slightly the lingual arteries will be

seen and easily clamped and tied. The stump is then seized with vulsellum forceps and held while the remaining half is similarly dealt with.

I can confidently state that a tongue can be removed in this manner with practically no loss of blood.

CASE IV.—SUPRA-PUBIC CYSTOTOMY.

The patient is placed in Trendelenburg's position, and from 6 oz. to 8 oz. of warm boracic lotion injected into the bladder. A sound is then introduced and held by an assistant; the handle, being well depressed, the tip is felt about two to three inches above the pubic bone. A dissection is now made down to the bladder, which is seen glistening and stretched over the sound. The bladder is then transfixed with a needle carrying a silk ligature, and can be held in position with the ligature while it is opened and the stone extracted. The advantages of Trendelenburg's position are twofold. The peritoneum is rolled well up from the anterior aspect of the bladder, and the stone also gravitates towards the fundus, which makes it easier to extract. The twenty-one stones now placed before you have all been removed by this method, and I have not had one fatal result. The same cannot be said for operations where bags and other apparatus are used to inflate the rectum. I have never once seen the peritoneum while performing my operation, and the time occupied is about five minutes.

CASE V.—TO FEED A HYDATID PATIENT.

I must give credit to my late house-surgeon (Dr. W. B. Vance) for suggesting this method to me.

I had operated upon an immense suppurating hydatid of the liver in a young girl at the Alfred Hospital. She had been running a very high temperature, and vomiting incessantly for some days previous to the operation. The temperature fell after evacuation of the cyst, but the gastric irritability was so intense that she could not retain any nutriment administered by the mouth. In consultation we determined to feed her by the introduction of cod-liver oil into the adventitia. The cavity having been thoroughly washed out with hot sterilised water, from one to two pints were absorbed by this method daily, and the result was most remarkable. She began to gain flesh and strength; the vomiting ceased on the sixth day, and from that out her recovery was rapid. The oil was continued as long as the cavity could contain any. I have adopted this plan with every case of hydatids in thin subjects ever since with the most satisfactory result.

CASE VI.—RUPTURE OF UTERUS DURING PARTURITION—LAPAROTOMY—HYSTERECTOMY—RECOVERY.

At 7 p.m. on 25th July Elizabeth J. discovered that she was in labour with her thirteenth child. Her twelve previous confinements had been normal in every respect. At 10.30 a.m., finding that something had gone wrong, Dr. Scantlebury, of Cheltenham, was hastily summoned, and found the patient in an advanced state of collapse and blanched, evidently from severe hæmorrhage. On examination Dr. Scantlebury discovered that the uterus had ruptured, and the child was lying free in the abdominal cavity. The condition was so serious that any attempt at operative measures seemed out of the question, and the usual treatment for collapse, including the hypodermic injection of strychnine, was resorted to. During the day she slightly rallied, and acting on my advice by telephone, Dr. Scantlebury superintended her removal to the Alfred Hospital, a distance of ten miles, as there were no conveniences in her own residence for carrying out a major abdominal operation. On her arrival at the Alfred Hospital at 9.30 p.m. I examined her, and found her blanched, collapsed, and almost pulseless. She was at once transferred to the operating theatre, the median basilic vein of the right arm opened, and two pints of normal saline solution injected, and during the ensuing operation an additional three pints were transfused into the same vein.

The pulse having improved, the abdomen was opened in the mid line under chloroform administered by Dr. Lempriere, and a large quantity of fluid blood and clots removed. The dead body of a female child, weighing nine pounds, and the accompanying placenta, were then found among the intestines, and were removed. The abdominal cavity was then thoroughly washed out with hot sterilised water, which had the effect of considerably reviving the patient, the pulse becoming markedly improved.

The uterus was found to be almost completely torn across at the junction of the fundus with the cervix at its posterior aspect. A further tear extended down the posterior vaginal wall into Douglas' pouch.

The ovarian and uterine arteries having been secured, the body of the uterus was amputated above the laceration. The edges of the rent were then approximated on either side with two sutures, and an opening left for the insertion of a large Keith's glass drainage-tube, which was passed into the vagina from the pelvis, and packed round with iodoform gauze.

The abdomen was now filled with hot sterilised water, and closed in the usual way.

The patient was put to bed, the usual remedies against collapse having been adopted. About three hours later the pulse became very rapid (156) and weak. Another $2\frac{1}{2}$ pints of saline solution were injected into the cellular tissue of the axillæ, the pulse rate falling to 144, and its volume improving. A hypodermic injection of morphia, $\frac{1}{4}$ -grain, was administered, and gave her a fairly quiet night. At 9 a.m. she commenced vomiting a foul-smelling dark fluid. I therefore passed a tube into the stomach, and, having emptied it of a large quantity of this offensive material, thoroughly washed it out with a weak solution of permanganate of potash. This treatment was carried out for the four succeeding days, when the vomiting ceased, and she was able to retain small quantities of nourishment by the mouth. The glass drainage-tube was removed in thirty-six hours, but had to be re-applied the following day owing to the discharge becoming offensive. The vagina was douched out five times daily with liquor hydrarg. perchlor. 1 in 5,000, and on the eighth day the tube was finally withdrawn.

From this time the general condition of the patient has steadily improved, and she is now convalescent. In conclusion, I cannot speak too highly of the valuable assistance rendered me during this desperate operation by my house-surgeon (Dr. W. B. Hearne), and I attribute the successful issue of the case in a great measure to his untiring and skilful management of the after treatment.

The nursing of such a case is of the utmost importance, and too high praise cannot be bestowed upon Sister Lawson and the nurses working under her.

I think the time between the rupture of the uterus and the operation for its relief (twelve hours) makes this operation unique in the history of gynecology.

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Mr. W. A. Dixon, F.I.C., F.C.S., Public Analyst of Sydney, after making exhaustive tests, says:—"There is no doubt but that "Eumenthol" Jujubes have a wonderful effect in the destruction of bacteria and preventing their growth. . . . I have made a comparative test of "Eumenthol" Jujubes and Creasote, and find that there is little difference in their bactericidal action."

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A YEAR'S HOSPITAL ABDOMINAL SURGERY.

BY FOURNESS BARRINGTON, M.S. EDIN.,
F.R.C.S. ENG., HONORARY SURGEON TO
THE LEWISHAM HOSPITAL FOR WOMEN
AND CHILDREN, EXAMINER IN GYNÆCOLOGY
IN THE UNIVERSITY OF SYDNEY.

READ BEFORE N.S.W. BRANCH B.M.A., SEPT. 29, 1899.

THE bare narration of a series of cases is of doubtful interest, so that in bringing this paper before you I have been actuated more by an idea of giving a brief sketch of the technique which I follow in abdominal surgery, and from time to time my reasons for the adoption of various methods, with the object of raising certain moot points. I am the more induced to so far crave your indulgence, as the path of progress in this branch of surgery is largely *pari passu* with improving technique. It has been my endeavour to bring out the salient features of the cases in tabular form, and subsequently to consider more in detail the methods adopted. As my hospital work brings me in contact with a certain amount of general in addition to gynecological surgery, I have embodied the former in the group of cases.

During my first year's service in the Lewisham Hospital for Women and Children, I performed twenty abdominal sections, as shown in the accompanying table.

There were thus twelve gynecological celiotomies with no death, eight general with one death, or a mortality on the whole of 5 per cent. (consecutively with these, five more sections have been done to date with no further death, which reduces the mortality to 4 per cent.)

The one death occurred after hepatotomy for a large hydatid cyst of right lobe of liver, the intense shock from which the patient suffered making it imperative for me to hasten the final steps of the operation, every endeavor to establish reaction failing. At the autopsy, the left lobe was found so intimately adherent to the diaphragm that it was necessary in removing the gland to include a considerable portion of the left half of the muscle with it, and was similarly almost completely involved by a large hydatid cyst, the whole liver being so implicated by the disease that about four ounces of normal hepatic tissue alone remained. The posterior wall of the marsupialized cyst abutted so closely on the inferior vena cava that it was separated from it by the ectocyst alone.

No.	Name and Residence.	Age and Civil Condition.	Provisional Diagnosis.	Date of Operation.	Condition found.	Nature of Operation.	Irritation.	Drainage.	Result.	Remarks.
1	A. S. Redfern	24. M.	Tubercular peritonitis	July 26th 1898.	General disseminated peritoneal tuberculoz	Explorat y	Free	Nil	R.	Great relief for a time. Died October 26th, 1898.
2	A. L. Leichhardt	41. M.	Cystic ovaries	Oct. 4th	Maudsley-orange-sized hematomas of both ovaries	Double malpighio-ophorectomy	Nil	Nil	R.	Previous convulsions on July 10th for severe menorrhagia and metro-rhagia with no good effect.
3	E. R. Yates	17. S.	Hydatid cyst of spleen	Oct. 21st	Adherent omentum freed after ligation in sections from fetal-head-sized cyst	Splenectomy—marsupialisation of cyst	Free of cyst	Of cyst cavity	R.	
4	J. O. Deboo	30. S.	Double pyramidal	Nov. 14th	Bilateral, containing pus in posterior fornix to sigmoid, rectum, and uterus, and each other	Double malpighio-ophorectomy	Free	Postural	R.	Gained 19 lbs. in weight since operation.
5	J. C. Gunnodah	23. S.	Broad ligament cyst	Nov. 22nd	Oocanal-sized suppurating cyst in left mesometrium jamming uterus against right pelvic brim; adherent to sigmoid and omentum. Both appendages matted and hopelessly diseased	Marsupialisation of cyst. Double malpighio-ophorectomy	Free	Postural	R.	
6	A. M. Beattie	54. M.	Carcinoma uteri	Nov. 25th	Early carcinoma of perio vaginalis	Vaginal hysterectomy	Nil	Nil	R.	
7	M. M. Leichhardt	16. S.	Renal tumour, probably tubercular	Nov. 29th	Lymphadenoma of spleen	Exploratory	Nil	Nil	R.	
8	M. D. Carrington	44. M.	Complete prolapso uteri	Dec. 2nd	Appendages normal	Ventrodilation of uterus	Nil	Nil	R.	
9	A. L. Ufford	21. M.	Myoma uteri	Dec. 8th 1898.	Five months' pregnancy sized multinodular myoma; left tubo-ovarian cyst size of closed fist	Double malpighio-ophorectomy	Nil	Nil	R.	
10	L. H. Leichhardt	27. M.	Ectopic gestation	Jan. 16th	Embryonic mass, 100 mm. in diameter, in posterior wall of uterus; cornu; goose.	Right malpighio-ophorectomy	Free	Nil	R.	
11	A. K. Mackay	37. M.	Adherent retroverted uterus & cystic ovary	Feb. 7th	Uterus egg	Ventro suspension of uterus, right ovariectomy	Nil	Nil	R.	Preliminary curetting of uterus.
12	A. C. Sanson	37. M.	Chronic malpighio-ophoritis	Feb. 14th	Double hydromalpighio-ophoritis	Double malpighio-ophorectomy	Nil	Nil	R.	Unable for work, and sterile since abortion six years before; twice previously curetted and otherwise treated. Preliminary curetting of uterus.
13	A. G. Lane Cove	15. S.	Ovarian cystoma	Feb. 21st	over anterior wall up to umbilicus; fluid evacuated; of pedicle in right lobe	Right ovariectomy	Nil	Nil	R.	
14	D. A. Aberdeen	14. S.	Hydatid cyst of liver	Mar. 20th		Hepaticotomy (Kassell's method)	Of cyst	Nil	R.	
15	A. C. Mackay	37. M.	Hydatid cyst of liver	April 4th	Right lobe distended by enormous profuse endogenous cyst	Hepaticotomy—marsupialisation of cyst	Of cyst	Of cyst	D. A. Aberdeen	
16	R. E. Jones	30. M.	Adherent retroversion of uterus	Apr. 24th	Uterus and appendages freed	Ventrosuspension of uterus	Nil	Nil	R.	
17	A. M. Glabe	44. M.	Incisional hernia	May 9th	Adult head-sized hernia when recumbent	Radical cure of hernia	Nil	Nil	R.	
18	E. W. Newtown	34.	Sarcoma of kidney	May 22nd	Right kidney enlarged by a pseudo-functuating mass; apple-sized new growth in periphery	Right nephrectomy	Nil	Nil	R.	Hysterectomy done by another surgeon 3 years before for prostatic hypertrophy. June 15th, double colporrhaphy for unrelieved prolapsus.
19	J. P. Penrith	24. S.	Pharyngeal myoma	May 30th	Umbilical reaching trilete calcareous myoma	Intersphincteric hysterectomy	Nil	Nil	R.	Died two months later of retroperitoneal recurrence and dissemination.
20	M. E. Emerton	41. M.	Cholelithiasis	May 20th	140 calculi evacuated	Cholecystectomy	Nil	Of gall bladder	R.	Extreme rapidity of tumour growth, weighed 3 lbs.

The cases recorded refer to *every* case demanding peritoneal section in my hospital service. My best thanks are due to my colleagues, Dr. Fairfax Ross for his valued assistance, to Drs. Maguire and McIlroy for the skilled administration of anæsthesia, and to the sisters who devotedly nursed the cases for faithfully carrying out detailed instructions

RESUME OF TECHNIQUE.

I. PREPARATORY TREATMENT.

1. *Diet.*—Liberal up to the day before operation. On the day of operation, which usually takes place at 2.30 p.m., breakfast at 8.30 a.m. of lightly boiled egg, thin slice of toast and small cup of tea or coffee; at 11 a.m., eight ounces of mutton broth; at 12.30 p.m., yolk of egg beaten up with a little hot water and an ounce of brandy.

2. *Evacuation of Intestinal Tract.*—Two days before operation one ounce of magnesium sulphate in concentrated watery solution flavored with lemon juice; the day before, a seidlitz powder; day of operation, at 10.30 a.m., soap and water enema, if necessary, repeated three hours later.

3. *Preparation of Skin of Abdomen.*—On the day preceding operation, full hot bath, abdominal wall and mons veneris well down to labia shaved, then scrubbed with spirituous solution of soft soap and water washed with plain hot water and well dried, then cleansed successively with ether, spirituous solution of biniodide of mercury (1-500), a fourth part of hot water being added, for at least two minutes, then bandage on after washing the skin with a waterproof covered pad soaked in 1-2000 biniodide of mercury lotion. On the operation morning the same process is again repeated, with sterilized swabs and a fresh pad, which has been soaking all night in 1-1000 biniodide lotion, is applied after dilution to 1-2000 with hot sterilized water, worn into the operating theatre, and removed when the patient is anæsthetized. This method I owe entirely to Mr. Lockwood, and I adopt it with slight modifications from his directions before all skin incisions from seeing repeatedly his splendid results at St. Bartholomew's Hospital.

4. *Pre-anæsthetic Hypodermic of Morphia gr. $\frac{1}{4}$ and Atropia gr. $\frac{1}{160}$.*—This has been administered half an hour before all my adult operation cases during the past nine months. My own observations are entirely in accord with those of Drs. MacLelland and Harris in a most instructive paper bearing on this subject in the July number of the *Australasian Medical*

Gazette, as to the beneficial effects before, during, and after operation, be the anæsthetic chloroform or ether.

II. OPERATIVE TECHNIQUE.

Assistants.—One qualified assistant, the anæsthetist, and one nurse for the sponges are all that are required—a second nurse being present for various minor duties. My maxim is "the less hands the better," for it certainly reduces the risk of contact infection to a minimum.

The immediate assistants, like myself, sterilize their hands by prolonged scrubbing with soap and hot sterilized water, then in 1-500 spirit and biniodide for at least two minutes, and finally in 1-2000 biniodide lotion. I wash my hands in sterilized water from time to time during the operation, and as far as possible manipulate my own ligatures and instruments, previously sterilized and kept in 1-60 carbolic lotion, either my assistant or myself helping ourselves directly to sponges.

Sponges.—The finest selected Turkey are used. After squeezing out all the 1-20 carbolic lotion, in which, after sterilization in sulphurous acid, they are kept, they are wrung out in hot sterilized water, in which they are cleansed by the sister in charge of them from first to last during the operation.

A routine number is used in every case, viz., 7 (5 various-sized flat and 2 round). If the case prove a septic one they are discarded as being entirely untrustworthy.

Final Preparation of Operation Field.—After removal of biniodized pad, the abdominal wall and pubes are well washed with spirit and biniodide (1-500), and then with plain sterilized water with sterilized swabs.

Trendelenburg's Position I find invaluable in dealing with intrapelvic and lower abdominal lesions, and I feel sure shock is greatly diminished by its use. The operation is rendered much easier, for the faithful eye can aid the possibly faulty fingers in breaking down adhesions; hemostasis can be ensured by bringing bleeding points clearly into view; the manipulation and exposure of intestines is avoided; and the operation area after sponge packing is shut off from the general peritoneal cavity, the sponges immediately absorbing any septic material from diseased structures, which inadvertently elude the sterilized swabs which are held ready in abundance, anticipating the possibility of its escape.

Ligation of the Pedicle.—For this purpose Nos. 3, 4, 5 tight China twist silk are used, prepared, like all ligatures, by myself. I never

employ a thicker ligature than I can possibly help, believing the finest silk consistent with security, and therefore the neatest knot, are the best surgery. I am convinced, also, that moderately thick silk makes a deeper groove, and is less liable to slip than when very stout is used. The objections raised to silk of moderate thickness are that it is apt to break, and that it is prone to cut through inflamed tissues.

My answers to such are:—

- (1) Undue force is an unnecessary adjunct to surgery, and if the ligature break it has been unskillfully tied. The sole object of the ligature is hæmostatic, force beyond the attainment of this purpose being entirely unnecessary. The use of ligatures thick enough for a halter, so that all available strength fails to break them have little to commend them, implying as it does waste of energy with no compensating advantage.
- (2) If the tissues are soft and friable, the proper practice is to compress them with large angled Spencer Wells' forceps, thus rendering them thinner and tougher, and able to resist firm ligature.

Irrigation and Drainage.—I have too much respect for the peritoneum as a faithful servant to assault it and prevent it doing its work by swabbing it with sponges as in the elaborate, time-absorbing, and pernicious process which is implied by the term "peritoneal toilet." Every effort is taken to prevent the access of septic material into the pelvis in a manner already alluded to, but if there be the least suspicion of infectious matter remaining, the pelvis having been lowered, it is immediately freely irrigated with warm sterilised water or normal saline solution. Similarly, I prefer to remove intrapelvic blood clots by flushing rather than by sponging. My invariable rule is, "when in doubt, irrigate." Irrigation presents many advantages over sponging, for the sterility and uniform temperature of the medium can be ensured; it cleanses recesses which are apt to be overlooked by sponges; its colour when returning is a hæmostatic index; it diminishes traumatism to a minimum; it is time-saving, for it can be continued during the insertion of incisional sutures; it combats shock; it tends to re-arrange the intestines in their normal pre-operative positions; and, if its temperature be sufficiently high, it is hæmostatic.

In dealing with septic cases, I invariably swab the stumps and raw surfaces left with

pure peroxide of hydrogen before washing out, and endeavour as far as possible to sequester them.

If any noxious matter escape into the cœlom after free irrigation a pint or more of sterile fluid is purposely left within it, and the foot of the bed raised eighteen inches for twenty-four hours on returning the patient to the ward—i.e., postural drainage is utilised, as suggested by Clarke, of John Hopkins Hospital ("American Journal of Obstetrics," June, 1897). By so doing we ensure the dilution of any septic material, and by diffusing it over a large area allow the healthy general peritoneum, whose absorptive function is unimpaired and the diaphragmatic lymphatics to promptly dispose of it. Postural drainage may be regarded as an adjuvant of no mean value to enable the peritoneum to still further augment its enormous eliminative powers. I have, therefore, abandoned the use of the drainage tube in such cases.

Nor do I drain in pelvic cases for hæmorrhage; all bleeding points are secured, and for general oozing I locally flush with sterile fluid at a temperature of 120° F., and, if necessary, hot sponge pack the pelvis while inserting the incisional sutures. If the cardinal vascular trunks and all visible bleeding points are secured (which latter the use of Trendelenburg's position readily admits) there is no fear of subsequent hæmorrhage, and any oozing is rapidly disposed of by the thirsty peritoneum. In rare cases of persistent hæmorrhage I should, in preference to hæmostatic tamponade, completely obliterate the utero-ovarian circuit by ligating low down the trunk of the uterine artery, presuming the ovarian vessels had already been secured.

The only class of cases in gynecological cœliotomies in which I might still use a drainage tube would be:—

- (1) A real or threatened leak of the rectum, and I would employ it here for the very reason that I regard it ineffective for general pelvic drainage, on account of its being so speedily shut off from the general peritoneal cavity it would act as a direct drain from the seat of lesion. Even here, if the appendages had been removed, I should prefer to adopt the suggestion of Howard Kelly, and fix the uterus in retroposition over the rectal lesion.
- (2) A non-enucleable pelvic abscess, which cannot be marsupialized or reached and drained per vaginam.

Probably the most moot point of to-day in abdominal surgery clings round the question of drainage. The following reasons have, among many others, caused me to discard the drainage tube:—

- (1) It invariably serves as an open trap for sepsis.
- (2) It ill attains its purpose—either setting up a rampart of adhesions which may cause the intestines to become matted around it in hopeless intricacy, or being immediately sequestered by omentum. The effect of these bygone autopsy learnt effects is to quickly render the tube extra-peritoneal. The drain is “about as effective compared with the absorbing ability of the peritoneum as a tiny brook to a great river in draining a lake” (Clarke).
- (3) Bacteriology has established the fact that in the vast majority of cases of chronic inflammatory pelvic disease the initial infecting micro-organism has largely lost its virulence.
- (4) In the comparison of a large number of consecutive cases in which drainage was largely used and then virtually abandoned, a distinctly higher mortality is with the former.

The same objections are equally applicable to gauze drains.

An adaptation of the old adage, “when in doubt, drain,” has with many given place to the newer dictum, “when in doubt, don’t drain,” and now that some of the once unknown danger signals of drainage are becoming manifest, it is not unreasonable to surmise that it is merely a question of time before it becomes, except as a rarity, a thing of the past in abdominal surgery.

My experience, gleaned from over 600 gynecological cœliotomies in the hands of some of the best British and Continental surgeons of the times in which we live, and in over 200 of which I acted as assistant, and subsequent supervisor, convinces me that much of the good attributed to drainage should really be credited to the irrigation which preceded it, and has taught me to regard the peritoneum, if well treated as a good and faithful servant, ever ready to make full use of the talents with which Nature has endowed it.

It is a significant fact that the use of drainage is commencing to be discarded in the treatment of hydatid cysts, the absorptive function of the peritoneum coming into play with immense advantage, as shown by the rapid convalescence, to the patient. With the substi-

tution of well-planned asepsis for antiseptics and careful hæmostasis, the modern trend in general surgery is towards a much restricted use of drainage.

Closure of the Parietal Incision.—Through and through silkworm gut suturing has usually been employed with intermediate skin coaptating horsehair, though when the condition of the patient permits, I now regard as infinitely superior layer sutures of wallaby tendon—fine white tendon being used as continuous appositional suture for the peritoneum, posterior fascia and subcutaneous tissue separately, and strong green (sulphochromicized) tendon similarly for the aponeurosis (the dynamic muscular layer being omitted, except in cases of radical cure of hernia, as a mark of respect to the mechanics of the abdominal wall), with a continuous horsehair suture for accurate skin coaptation. My thanks are especially due to Professor Watson, of Adelaide, for whose valued advice as to the preparation and uses of these tendons I am deeply grateful.

The Abdominal Dressing.—The parietal wound first and then skin around it are well washed with hot sterilized water, and thoroughly dried. Several layers of plain sterilized butter cloth placed over the incision with superposed sterilized gauze-covered pads of cotton-wool, the whole being fixed by a snugly-applied four-tailed binder. No iodoform is used over the wound or its vicinity, for in my experience all clean wounds heal infinitely better without it.

The After-treatment of the Wound.—The following day the bloodstained gauze is removed from the wound by sterilized forceps, and fresh sterilized strips substituted, but the wound is not otherwise touched. This dressing is left undisturbed for a fortnight—then, without applying any antiseptic lotion, the intermediate through and through sutures are removed, leaving the lowest one, and a week later the remaining silkworm gut and all the horsehair are abstracted, though often leaving the bottom one, which I regard as the most important through and through stitch, for a month. Strapping the wound to support the scar is quite unnecessary if the sutures be long retained, and its avoidance spares the patient the painful process of removal.

I believe the longer the sutures are left the firmer the scar and the less likelihood of incisional hernia, and therefore it is that abandoned layering tendon sutures have everything to commend them. The plan of early removal of sutures, usually the outcome of using silk or

tying the sutures too tightly, is much to be deprecated, for I have known the whole abdominal wound to open up on the seventh day during a coughing fit after removal of sutures a few hours previously.

All my incisions have healed per primam and up-to-date, stitch abscesses have been entirely eliminated from my practice. Speaking in general terms the technique followed is entirely aseptic after once commencing the incision until the sutures are removed.

The work here referred to was done in a small room improvised for operative purposes, during the building of the new wing of the hospital, which is now, I make bold to say, provided with the most up-to-date operating theatre in Australia, and the patients were all, from lack of accommodation, nursed in a general ward, now happily also a necessity of the past.

III. GENERAL AFTER TREATMENT.

Briefly summarised :—

1. No morphia.

2. Nothing by mouth during the first twelve hours, though in old women and young adults, after the lapse of three hours, teaspoonfuls of hot water, hot water and brandy, or barley water flavoured with lemon are allowed every half-hour; one or two normal saline enemata for the alleviation of thirst and nutrient enemata every three or four hours, the best, in my opinion, being one ounce each of brandy and Carnrick's liquid peptinoids.

3. Evacuation of the bowels within twenty-four hours. At daybreak the following morning 5 gr. of calomel are given, and two hours later a seidlitz powder alone, or with ʒi-ii. of sodium sulphate, or half an ounce of magnesium sulph. in lemon-juice water, according to the previously ascertained responsive index of the bowels, a turpentine enema being administered after a similar interval. If the case has been a septic one the calomel is given at midnight. Soon after the calomel a small cup (ʒiii.) of hot black coffee is taken, and it, I think, does good as a stimulant, and by helping to start intestinal peristalsis. If the cathartics are vomited they are repeated until kept down, and in some cases a repetition of calomel, saline and enema at two hourly intervals may be necessary. Under any circumstances the bowels are gotten to act within twenty-four hours of the operation. If the means I have mentioned do not suffice Noble's enema of mag. sulph. ʒii. ol. terebinth, ʒss. glycerine, ʒi. aquam ad. ʒiv., given through a catheter almost invariably causes the desired effect. The advantages of

early catharsis are the convalescence is practically afebrile, it is a good precaution against sepsis and peritonitis, and one can commence much earlier to feed.

4. *Combat Shock*.—Careful note is taken of the pulse, and if it exceed 100 per minute 3-5 mins. liq. strychnine are given hypodermically, and continued at varying intervals till it keeps below 100 per minute. An alternation of 1-100 gr. digitalin with strychnine hypodermically where the pulse has been weak and rapid has been given with good effect. If the shock be marked, as in cases 15 and 18, I transfuse submammarily or intravenously normal saline solution with brandy in proportion of an ounce of the latter to the pint, during or immediately after the operation.

5. *Diet Sca'e*.—Second day (*i.e.*, day after operation), if no vomiting, Carnrick's peptinoids and sodawater, water gruel, weak tea, chicken or mutton broth. If the patient vomit, everything by mouth is withheld for three hours. Third day, Benger's food, malted milk, boiled custard. Fourth day, soft boiled egg, thin bread and butter, beef tea and toast, milk pudding, bread and milk. Fifth day, boiled fish. Sixth day, boiled chicken. Eighth day, ordinary diet.

To summarize the points advocated :—

- (1) The fewest possible assistants.
- (2) The frequent use of Trendelenburg's position in dealing with intrapelvic and lower abdominal lesions.
- (3) A careful aseptic technique after once commencing the skin incision.
- (4) The use of the thinnest pedicle ligatures consistent with security.
- (5) Free abdominal irrigation with sterile fluids where the pelvis is contaminated, and postural drainage as a substitute for drainage by glass tubes or gauze.
- (6) The abandonment of the drainage-tube or gauze for pelvic hæmostasis.
- (7) Long retention of through and through incisional sutures, and the immense value, where admissible, of the tendon layering method of coaptating the various components, excluding the muscular (except in cases of radical cure of hernia) of the abdominal wall.
- (8) The inadvisability of the use of antiseptics to the carefully adjusted parietal incision.
- (9) Last, but by no means least, thorough preparation of the abdominal skin and free evacuation of the bowels before and early catharsis after operation.

(For discussion on this paper see page 463.)

ASTHENIC BULBAR PARALYSIS.

By ANGEL MONEY, M.D., F.R.C.P. LOND.,
SYDNEY.

A most praiseworthy breadwinner, aged 26, a teacher of music, had influenza or some such illness about twelve months ago; but prior to this her nervous health had been none of the best. Ever since the influenza, she had been very weak, incapable of much exertion, and showed signs of great debility, not to say paralysis, in the face, lips and eyelids. There were double ptosis, more marked on the left side; inability to whistle or blow out a candle, feeble power of saying the labials p, b, and the gutturals k, g, a nasal quality of voice, occasionally regurgitation of food through the nose, feeble closure of the upper opening of the larynx during swallowing, difficulty in swallowing and coughing, with marked weakness of the voice.

Anyone seeing the case, might not unreasonably think that he had to do with serious diphtheritic paralysis. The young woman presented no obvious signs of hysteria. The inability to swallow, accumulated mucus in the throat and the normal salivary secretion, reminded me of nothing so much as occurs in cases of bulbar paralysis.

There was no fibrillary contraction of the paralysed muscles, and no appreciable loss of reaction to the faradic stimulus. The weakness varied in degree from day to day in a manner which rather astonished me, even though I knew that such remarkable variations occur in tubercular meningitis, some sclerosis of the brain and cord and other organic nervous diseases. The knee jerks were normal; the other deep reflexes were not obtained; the superficial reflexes were equal and symmetrical; there was a tache cerebrale, equal and symmetrical on the two sides of the abdomen. After prolonged rest in bed with massage and an arsenical tonic, the patient may now be described as in good health; no ptosis, no dysphagia, no sign of paralysis; she can walk well, and go through a fair day's fatigue.

I am prepared to accept a diagnosis of post influenzal paralysis or multiple neuritis insufficient to disturb electrical reactions. The relatives of the patient were very desirous to know what was the nature of the disease. On first seeing the case, with its history of several months' duration, the diagnosis seemed very difficult. Nor even now, in view of the apparent recovery, can the case for diagnosis

be dismissed as ended. Similar cases have been known to terminate suddenly in death from a recurrence of symptoms;* and a *post mortem* examination has sometimes revealed nothing at all, sometimes a form of sclerosis or even a tumour.

In 1895, Strümpell wrote a paper on cases of asthenic bulbar paralysis, the distinctive feature of the cases being that there were no anatomical changes to be found after death; that is, no macroscopic and no microscopic changes. The date of the paper is probably sufficient evidence, that most of the recent methods of histological research, were employed before a negative conclusion was attained.

The symptoms recorded in one of his cases, a girl aged twenty, were remarkably like the case I have narrated: A great feeling of weakness and inability to do anything without feeling very tired, pains here and there, ptosis, difficulty in speaking, swallowing and biting; later on, paralysis of the muscles of the neck, back and limbs, followed by respiratory paralysis. The sphincters of the anus and bladder were not touched. There was no muscular atrophy, the knee jerks were a little diminished, possibly from hypotonia, the electrical reactions were normal. In these cases, Strümpell specially draws attention to the liability to remissions; but in the case I have quoted the patient died suddenly, after several attacks of dyspnoea, ten months after the onset. One day my patient was so feeble, and respiration so weak with great pharyngeal accumulation of mucus and inability to clear the air passages, that I cabled to Dr. Hardy, of Hobart, that I feared death would ensue from respiratory paralysis.

Even if a neuron is the seat of an inflammatory or degenerative disease, the hypothesis of the resultant palsy being due to a molecular disturbance of equivalent nature to that which underlies ordinary debility, may reasonably be discussed; the same may be said should a tumour or patch of sclerosis be present. Therein lies the difficulty, and possibly one explanation of understanding how diagnosis is so difficult, and how organic diseases may be accompanied by signs and symptoms, which are usually regarded as of functional origin. To mark such cases with the brand of hysteria is cruel and unscientific.* The term hysteria should be abandoned and abolished altogether. In its most glaring manifestations, which are probably molecular disturbances of the certain neurons of the cerebral cortex, the process is one of abnormality and ill health, even though punish-

* See Clifford Allbutt's Case, "System of Medicine," vol. vii., p. 238.

ment, electricity, or moral suasion may be sufficient to effect a temporary cure.

We know that peripheral stimulation may prevent an epilepsy, yet the time has long gone by since epilepsy was regarded as a devil deserving to be ejected, or as a disorder requiring corporal punishment. It has long occurred to me as a hypothesis, that hysteria and epilepsy differ from one another much as galvanism does from faradism. The process in hysteria may affect the same neurons as those which are the seat of disorder in epilepsy; in the former, the disturbance is more prolonged and less violent; in the latter, the neurons are the places in which voluminous discharges occur at intervals. The processes may present in the same individual varying and various combinations. My thanks are due to Dr. Hardy for sending me such an interesting case.

THE PREVENTION OF CONSUMPTION.—The New South Wales Board of Health has issued a large poster about 3 ft. by 2½ ft. giving certain suggestions for the prevention of consumption for the general information and guidance of the public. It is stated therein that consumption causes more deaths than any other single disease, and is illustrated by a large graphic diagram which shows that consumption causes death to the amount of 5·69 against typhoid 2·92; diphtheria 2·54, scarlet fever 0·72. In large block letters it is printed that consumption is infectious in man and in animals, and the possibility for human beings to acquire a disposition to become consumptive. Under the heading "Consumption is Preventable," various precautions and directions to consumptives with regard to cleanliness and disinfection with very terse and adequate instructions are given. The whole concludes with the following sentence in black letters:—"Scrupulous cleanliness in person and surroundings helps the consumptive to overcome his disease, and prevents those associating with him from taking harm."

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CÆSAREAN SECTION FOR DYSTOCIA FOLLOWING HYSTEROPEXY.

By F. C. BATCHELOR, M.D., DUNEDIN, N.Z.

READ BEFORE THE OTAGO SECTION OF THE N.Z. ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

I venture to bring the report of this case before you as it opens several points for discussion, and trust you will not deem it the less interesting or suggestive from the fact that the issue was unsuccessful.

J.B., aged 22, single, was admitted first under my care into the Dunedin Hospital on December 9th, 1897. The following notes are from the report book. "Had been treated in this hospital three years previously for ulceration of the stomach and anæmia. Was confined of her first child two years ago, prematurely, at the eighth month; delivery was difficult; chloroform and instruments were required. Was ill for six weeks following but gradually got better, although she has never felt well since, suffering from pelvic pain and discomfort."

Vaginal examination showed a retroverted and fixed uterus with appendages involved in adhesions.

On December 17th, 1897, an abdominal section was performed; the fundus uteri was found attached posteriorly by a broad band-like adhesion which was broken down with some difficulty; the ends of the Fallopian tube were matted, and each ovary involved in adhesions; they were freed and left. The fundus was fixed to the anterior abdominal wall by three silkworm gut sutures, each passing through peritoneum, abdominal muscle and fascia. The patient made an excellent recovery, and left the hospital on January 8th, 1898, three weeks from date of operation.

Nothing further was heard of the patient till the evening of November 21st, 1898; our house-surgeon then requested my attendance on a woman, who had been brought in from the country in labour; delivery was arrested, it was supposed, from the presence of an ovarian tumour. The account we got was that the girl had been in labour from the early morning; her doctor failed to effect delivery, and, recognising something very unusual, had called in another practitioner; both failed to deliver, or to come to any decided conclusion as to the cause of the difficulty, but considered it probable that an ovarian tumour had slipped into the pelvis, and was blocking the downward passage of the head.

The patient was somewhat weak and exhausted from the effects of her long labour, chloroform administration, and the journey into town; her pulse was 118 and small.

By examination the appearance of the abdomen was very remarkable; the round fundus of the uterus was seen outlined and pushing out the abdominal wall above the pubis; on either side was a soft fluctuating swelling, and projecting posteriorly from the left lumbar region was a firm, rounded mass, the foetal head.

Per Vaginam.—The whole hand had to be passed into the vagina before the cervix could be reached; high up above the pelvic brim and directed towards the left side of the pelvis, the right edge of the dilated os uteri could be made out, and still higher and invading the left loin, was the vertex of the foetal head.

As soon as I recognised the scar of the old abdominal incision, it at once occurred to me that the difficulty in labour was probably due to the previous hysteropexy. Several reports had appeared in the journals about this time of difficulty in labour following this operation, and during the previous year I had operated upon several cases, and was rather on the lookout for trouble.

The first thing done was to pass the long gum elastic catheter into the bladder; no urine passed, and it was not until hand pressure was made on the fluctuating swelling on either side of the mesial projection, that the urine flowed away; a considerable quantity was drawn off, and the fluctuating swellings disappeared.

A correct diagnosis was now readily made, for by dragging on the rounded fundus in front, a broad tense band of thick fibrous tissue was felt, binding down the whole of the anterior fundal wall to the symphysis pubis. Considerable traction was made on the fundus in the hope of stretching this band, and so altering the position of the fundus as to lever the axis of the cervix from its abnormal position in the left loin to that of the pelvic inlet.

It was absolutely impossible with any justifiable force to effect any change, so dense was the band of adhesion.

It was clearly impracticable to apply the forceps through the cervix in its distorted position above the pelvis. Version was equally out of the question; the uterine muscle was in a state of continual spasm, the liquor amnii had long since drained away and great violence would have been required to have inserted the hand into the uterus; it was a most difficult matter even to reach the right lip of the cervix.

The only choice seemed to lie between division of the band or completion of delivery

through the abdominal wall. Against the former procedure, were the facts that considerable difficulty might have been expected in separating such a dense thickened mass of tissue, and further, it seemed doubtful, even if we were successful, whether the alteration in the position of the fundus would have sufficiently affected the axis of the cervix to allow of delivery per vaginal wall by forceps. On the other hand, the foetal head was felt projecting above the crest of the left ilium; here it was very close to the surface, and it seemed to me probable that the base of the broad ligament would have been so drawn up and expanded by the distended uterus, as to permit of reaching the top of the vagina and os uteri through an incision above the crest over the site of the foetal head, without opening the peritoneal cavity; in fact, to perform a modification of laparo-elytrotomy.

A small exploratory incision was made in this position, but it was found that a reflexion of the peritoneum dipped into the pelvis, and the vagina could only be reached by cutting twice through this membrane.

The incision was at once closed and a Cæsearean section performed; the only difficulty here was in the extraction, so tightly was the foetal head gripped by the cervical portion; the fetus had been dead some time. The wound was closed in the usual manner, a layer of gauze having been inserted into the uterus, and passed through the cervix into the vagina, after thoroughly douching the passage.

The patient left the table in a weak condition; pulse 130. The operation was performed on Monday evening, November 21st. On the Tuesday and Wednesday following, the patient's condition was very satisfactory, the pulse fell to 98, the temperature was normal; she took light nourishment and complained only of epigastric pain; this she said had troubled her all through her pregnancy, and she attributed it to a return of her old complaint, "ulceration of the stomach."

On my visit on Wednesday morning, she seemed practically out of danger and it did not seem necessary to me to visit again specially that day, expecting the house-surgeon to inform me if anything went wrong. Towards evening he noticed the pulse somewhat quicker, but there was nothing that made him consider her condition in any way alarming, and he did not communicate with me.

After midnight she became somewhat restless and complained of the severity of the epigastric pains; about 3 a.m. she vomited a large quantity of black blood, and died almost immediately.

On my visit the following morning (Thursday), I was informed of the unexpected termination, and was inclined to agree with the house-surgeon that the sudden death was probably due to hæmatemesis from ulcer of the stomach.

Post-mortem examination.—Both abdominal incisions, central and lateral, cleanly healed and healthy; a small quantity of flaky fluid in Douglas' pouch; the uterine surface in the left side of the incision looked bruised, swelled and sloughy; the sutures were dragged, and the edges of this side were soft, flaccid and separated. On the right side of the incision the uterine wall looked perfectly firm and healthy. After removal of sutures it was found that the incision had fallen exactly alongside the edge of the placental insertion; on the right side the muscular tissue was firm, healthy and normal; on the left side the edges of the incision and the placental site were bruised, sloughy and necrotic.

The stomach and duodenum were examined; there was no ulcer nor evidence of scar tissue, but the mucous membrane showed numerous small ecchymosed patches. The cause of death was, in my opinion, due to infection from the placental site; it is probable that the sutures offered sufficient mechanical resistance to prevent any escape of septic fluid from the infected area for the first two days, but shortly prior to death the tension had overcome their resistance, and an escape of septic material suddenly occurred into the peritoneal cavity, with rapid septic absorption and fatal septic intoxication.

This is the more likely to be the case, as it must be remembered that prior to operation the patient had been in labour some twelve hours, and considerable internal manipulation had been employed, partly for diagnostic purposes and partly to effect delivery.

The band of scar tissue, the result of hysteropexy, was strong and fibrous; it spread out in a triangular shape, the apex near the fundus, the base towards the symphysis. It would appear that this tissue must have hypertrophied as an accompaniment of pregnancy, for it is difficult to understand how so dense a mass of tissue could have resulted from the original hysteropexy from which recovery had taken place without any indication of inflammatory reaction. It is fortunate that no attempt was made to divide it for the purpose of effecting delivery; during life it would have been impracticable except by most extensive incisions.

One lesson to be learned from this case is never to perform hysteropexy on a fertile woman. Ventro-suspension, or the formation of false ligaments by sutures through the peri-

toneum only, seems to give very satisfactory results. Kelly, of Baltimore, reports on seventy-five cases; pregnancy occurred in four-teen of these subsequently without any special trouble.

Ventro-fixation, on the other hand, must give a much firmer attachment to the uterus, and would be, therefore, preferable where the operation is performed for bad cases of prolapse, but if undertaken during the child-bearing period of life, measures should be at the same time adopted for occluding the tubes.

Then as to the choice of operation performed:—To anyone who had not examined the condition this patient presented on admission to the hospital, my treatment may seem somewhat drastic, but the absolute impracticability of effecting delivery through the vagina immediately impressed itself upon everyone who made examination; several medical men of experience who saw the case with me at once recognised that it would be worse than futile to attempt delivery by the normal route.

The laparo-elytrotomy was a mistake; I expected to find the base of the broad ligament more drawn up, and so to have opened the vaginal dome sub-peritoneally; it did not, however, in any way influence the result; the exploratory incision took only a few minutes, and the wound healed kindly.

Looking back it is evident now that a Porro should have been the operation; one might have anticipated infection from the uterus after repeated manipulations and examinations; at the time, however, it seemed to me undesirable to remove the reproductive organs in so young a woman without evidence of bony deformity, and I trusted the danger of infection would be counteracted by free douching and drainage.

From experience in all forms of abdominal trouble one is on the look-out for sudden and unexpected changes, but I cannot remember a case where appearances were more deceptive than the present instance. On the Wednesday morning, at the time of my visit, the patient had a good pulse and temperature, there were no vomiting, abdominal tenderness or distension, and the facial aspect was excellent; our house-surgeon, who had considerable experience in abdominal cases, even towards night considered her condition satisfactory; the only explanation, it seems to me, is that for the first two days any infection was localised to the uterus alone, and it was only the sudden escape of some highly septic material into the peritoneal cavity which caused the sudden absorption and fatal collapse with so little warning. This view is further strengthened by the fact that both abdominal

wounds were found perfectly healthy at the *post-mortem*; this could hardly have been the case had the patient been suffering from general infection during the healing process.

After severe abdominal operations, even where recovery eventuates, the patient will often remain for days in a critical condition, vomiting being the most persistent symptom, and not rarely black fluid is ejected from the stomach, possibly altered blood. In these cases have we to do with a similar but less severe type of case? Is it that a given quantity of toxic matter may be absorbed from the peritoneal cavity, and be eliminated by the stomach or bowel, and by its irritating effect on the mucous lining of these viscera produce ecchymosis and hæmorrhages?

NOTES ON ASEPTIC SURGERY.

BY H. CRITCHLEY HINDER, M.B., CH M. SYD.,
HON. SURGEON, PRINCE ALFRED HOSPITAL,
SYDNEY.

READ BEFORE N.S.W. BRANCH B.M.A., SEPT. 20, 1899.

It would appear that I am taking up a very surgical subject, but inasmuch as we have no pure physician amongst us we are all surgeons, and, anticipating the retort, I am quite willing to admit that the pure surgeon is likewise an unknown quantity. Perhaps Federation will give birth to him. This subject, then, must be of considerable interest to all, and I therefore feel that I need offer no apology for its introduction.

I have for some time past been considerably interested in the development of aseptic methods, and to that end have myself engaged in a little work with the object of ascertaining to my own satisfaction the best methods of securing asepsis in the cheapest way. Perhaps I am somewhat imbued with those economic principles which are said to be part and parcel of the very nature of the people at whose feet it was my privilege to sit in my student days. At the same time, if economy be exercised, a free expenditure, when necessary, in order to obtain a good result must be sanctioned with cheerful alacrity.

In a short paper like this, I feel that I should not burthen you with quotations from other sources but adhere as closely as possible to my own impressions.

Without doubt, nothing is more difficult to sterilise than the skin of one's hands, though the more attention the surgeon pays to this particular subject the greater will be his measure of success. One of the most important points to be borne in mind in connection with

micro-organisms, and yet one which is repeatedly forgotten, is the fact that when covered with grease, antiseptics have little or no effect upon them. A given percentage of a given antiseptic may kill an organism in a nutrient medium in a certain number of hours, because everything is in favour of the antiseptic, but just consider for a moment how skin organisms are situated. Here we have a rough surface full of cracks and crannies packed with dead epithelium and greasy material, which pre-eminently afford excellent accommodation for bacteria and their spores. It is very evident then that the task of cleansing the skin is by no means a light one. In the first place the skin must be freed of all greasy matter, and then a sufficiently strong antiseptic applied in order to kill those organisms which have been exposed.

The cheapest fat solvent is common soap, and the best soap ordinary green soap. The soap should be rubbed in with a soft nail brush and warm water, carefully selecting every crack and cranny, and paying most attention to those parts which are most difficult to clean, such as underneath and round the sides of the nails. I have invariably found samples taken from the unexposed centre of a portion of green soap quite sterile. The exposed surface always yielded a positive result, though that may easily have been because the spores were situated on particles of dust and did not actually come into contact with the soap. Green soap alone will not sterilise the hands. Koch states that one in a thousand potash soap completely prevents the growth of anthrax, so that it is very evident that soft soap is distinctly of value as an antiseptic, though it may not be a very powerful disinfectant. Notwithstanding this, the almost universal common soap is almost as serviceable in getting rid of the greasy masses of dead cells.

The nail brush, which should be a cheap wooden one, is one of the most important articles of the surgical kit. These brushes can easily be sterilised by boiling, and very easily replaced. A soft brush is much better than a hard one, inasmuch as it cleans out the cracks and crannies without abrading the epithelium, a matter of some importance to an operator.

After cleansing the skin, we must turn our attention to its sterilisation. In so far as I have been able to ascertain, for cheapness, portability and efficacy in producing a good result, nothing is equal to permanganate of potash. Any polished surface, such as glass, enamel, or steel, may be rendered sterile by rubbing briskly with a boiled, that is to say a sterile towel, after grease has been removed

with soap and hot water. Take then a smooth sterilised basin, and place in it a strong solution of permanganate of potash; this should be of a strength sufficient to stain the hands a dark mahogany brown, almost black in fact. Scrub this in with a soft nail brush, paying particular attention to the finger tips, which are at the same time the parts most easily made septic, the most difficult to render sterile, and the most likely to contaminate the wound. The hands may be decolorised in a solution of sulphurous or oxalic acid in sterilised water. Oxalic is on the whole to be preferred on account of its portability. The best way to decolorise is to take about a drachm of the acid in the hands well wetted with sterile water, rub this over, and the hands rapidly become beautifully clean and white. Sulphurous acid is a very good decoloriser, but it is intensely irritating to the mucous membranes.

This method which I have described is practically the method of Schimmelbusch. After sterilising the hands by means of this method, I have endeavoured to obtain cultures on ten different occasions, taking scrapings and clippings from thirteen different places on each occasion. The results have varied slightly, and have greatly depended upon the skill of the individual. The scrapings were made with a sharp tenotomy knife and were mostly taken from the sides of the nails, underneath the nails, and from the corny part of the palms. In one instance, the hands of a medical student which were filthy with black grease, were rendered sterile, and only one test tube gave a positive result of *staphylococcus albus*. On three different occasions I made use of the same individuals who sterilised their hands on one occasion with potash permanganate, and on another with hydrarg. biniodide and spirit one in five hundred. Two trials gave equal results with the two antiseptics, two tubes showing positive results out of the thirteen used on each occasion. In the third trial, the biniodide showed four septic test tubes out of thirteen, while the potash permanganate showed but two. This may not indicate a great deal, still I have often, on the hands of skilled persons, proved the efficacy of the potash permanganate method.

Lest this should not appeal to some, I shall add another instance. I had operated upon a foul, stinking, suppurating appendicitis with general peritonitis, at 11 o'clock in the morning. At 9 p.m. the same day I was compelled to operate upon a large strangulated

inguinal hernia, which needed prolonged manipulation and separation of adhesions occupying half an hour after the gut was exposed. No tube was used, and the patient ran an absolutely aseptic course.

Notwithstanding this, I still think that an operator acts most wisely if he refuses to operate on an aseptic case upon the same day in which he has already operated or in any way rendered his hands septic from a septic case. While it is perfectly true that with extraordinary care the hands may be rendered sterile, still, after all, infection is a matter of quality and quantity, so that a fair dose of organisms from hands infected with an attenuated culture would be borne without very serious consequences, but a mere pin prick may produce a lethal result if the organism so introduced be virulent. Knowing, then, how difficult it is to render the hands absolutely sterile, I think that we have good grounds for exercising the greatest reluctance in taking it for granted that our hands are clean.

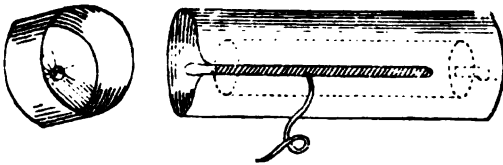
On the 22nd of last March, at a meeting of the Society of Surgery, Paris, this same matter of sterilising the hands was discussed, and those present were unanimously of this opinion. Lockwood, in speaking of his method, says: "This method of disinfection requires a good deal of pains and a degree of skill which can only be acquired by practice; beginners usually fail." The extraordinary immunity from serious sepsis which attends the practice of ignorant midwives is probably due to the fact that they do not deal with virulent forms of sepsis and spend some portion of their time at the wash-tub. There is no doubt but that the safest way to keep the hands clean is to avoid touching septic materials as far as possible, and I feel sure that many a time fingers are contaminated with septic materials when there is no real necessity.

The sterilising of ligatures.—This subject has vexed the minds of many of late years, and many curious devices have been made use of in order to obtain perfect results. The thermal death-point of pyogenic organisms is not very high, and it is hardly likely that sheep suffering from anthrax would be selected, from whose intestines gut would be manufactured. I have almost always adopted the method of Koch, which was also that adopted by Schimmelbusch in Bergmann's clinic. The catgut, if in oil, is wiped clean, soaked in ether for twenty-four hours, then boiled in alcohol for fifteen minutes every other day three times in succession, and kept in alcohol. A stock bottle of this may be kept and the reels

required for the day's use boiled once more. If the gut be boiled six or eight times it becomes somewhat rotten. A method I have found yield equally good results is to soak the gut as usual in ether for twenty-four hours, then boil in 1-500 biniodide of mercury and alcohol for fifteen minutes. The gut is left in this solution. Gut so prepared is somewhat harder and stiffer, but it loses none of its strength. Repeated boiling in this solution soon makes the gut brittle.

I have never yet obtained a culture from gut prepared after either of these methods. On one occasion I took samples from twenty different reels and sterilised them; not one gave a culture.

Believing as I do that the hands of the operator and his assistants are the most common source of infection, I have lately had silver-plated brass reels made; the sterilised gut is placed in these, the gut escaping by means of a slit in the side. This plan keeps the gut from contact with the hands of the operator, it affords a better grip, and uses up only one half the gut, because one half the length of the ligature is still in continuity with the rest of the reel in the box.



Men living in the country in particular may readily supply themselves with excellent ligature material with very little trouble. Kangaroo and wallaby tendons may be procured without very great difficulty and prepared after this fashion:—First secure the tail, slit up the skin from end to end, then strip off the skin. Take a hook, slip it under the tendon about the centre and draw it out. Having obtained all you require soak them in water for a few hours, in order that the sheath may be slipped the more easily; place the tendons in a three per cent. solution of formalin for twelve hours, then take them out and place them in a solution of one part glycerine to eight of alcohol which has already been boiled. This may be kept as stock. The absolute sterility of the tendons depends on the care which has been exercised in the preparation. To make doubly sure it is best to place the tendons required for use in a solution

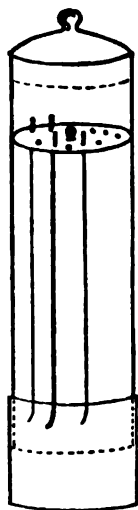
of biniodide of mercury, and alcohol for a few hours before they are needed. Kangaroo tendons will not split up very well for fine work, but rock wallabies or some of the smaller varieties of wallaby, yield beautifully fine tendons fit for the finest work. There should be little difficulty in sterilising these tendons, because they are sterile at the onset, unlike catgut, which, prepared from intestine, is crowded with organisms.

The sterilising of silk and silkworm gut is not difficult, for either of them may be boiled over and over again without apparently affecting their strength. Horsehair is best kept in stock dry, and a few strands boiled immediately before use. When first taken from the beast it is best to wash it well with soap and warm water, then boil it, dry it, and stow it away dry.

I was always much perplexed about the keeping of needles aseptic and bright, and free from rust. I find that needles, if kept in a solution of lysol or in a concentrated solution of common washing soda, will remain perfectly bright and aseptic for I should imagine any length of time. I usually prepare the soda solution in this way. I fill up a test tube or small bottle with pieces of washing soda, then pour water in till it completely covers the soda. Some little time elapses before the soda becomes dissolved. This solution answers all that is required. I took three needles which had been wiped in streptococcic pus, and placed them in a saturated solution of washing soda. At the end of one hour they were placed in nutrient bouillon. Not the slightest sign of growth became manifest.

The sterilising of catheters is of great importance, though it appears to be very often beset with some difficulty. There is really no need for this at all. In the first place, few, if any, soft catheters will stand antiseptics, yet all of them will be very little if at all damaged by boiling. The better made, the more cleanly finished the catheter, the less does boiling affect it. The red rubber Jaques, what is known as the Belfast linen, the black French, the English gum elastic, may all be boiled, but after the boiling the catheter must be laid out perfectly straight till it cools.

I show you here specimens of these catheters which I first boiled for five minutes every day, and then, as they did not appear to show any marked change, I boiled them for one hour, and carefully let them dry lying flat out on a cloth.



CATHETER HOLDER.

In order to completely sterilise catheters, and at the same time allow them to dry without interference, I had this steriliser made. It consists simply of a long copper cylinder, open below, and having a closely-fitting lid above. About two inches from the upper end a small ledge inside supports a round, flat, moveable plate of copper, which is perforated with holes to correspond with the different sizes of catheters; the lower end of the cylinder fits fairly accurately within a copper vessel below about four inches deep.

The ends of the catheters should, when suspended from the plate above, just hang in the water, for within the eye of the catheter is without doubt the most difficult part to render sterile. The rest of the catheter is sterilised by the steam. When the water has been boiling for twenty minutes the bottom pot is taken off, the water thrown out, and the pot replaced. The catheters are thus, without being in any way exposed or handled, left suspended to dry in the upper chamber, so that the apparatus at once serves as a catheter-holder and steriliser.

In order to test the efficacy of this steriliser, I took a gum elastic catheter, certainly to my mind the most ill-made and difficult to sterilise of all catheters. The end of this was caked with blood and pus. I then poured some stinking urine down the whole length of the catheter, suspended it in the steriliser, and kept the water boiling for fifteen minutes. Three pieces taken from the end and other parts of this catheter gave no culture after several days of incubation.

Mansell Moullin speaks of catheters which he has had made with the outer and inner surfaces equally smooth. It is extremely difficult to get these things made in the colony, however; the catheters which stand boiling best are those of German make, and, like Belfast linen, with funnel-like mouths, and which may be procured in the city. The black become slightly crinkled, and the gum elastic are somewhat roughened.

The great fault with all the catheters I have seen is that the portion below is so clumsily and imperfectly closed. Smooth steel sounds are easily made sterile by washing and rubbing briskly with a sterile towel. This was pointed out long ago by Schimmelbusch.

I find that the best way to sterilise the cystoscope is to rub it well with a strong solution of lysol, and then wash it over with sterile water.

I have always been given to understand that the sterilised dressings of some makers are now prepared with great care and thoughtfulness. Some time ago I tested samples of the plain absorbent wool which was most commonly used here, that prepared by Max Arnold. Portions taken from about a dozen different packets proved in every instance to be absolutely sterile. No doubt those of many other makers would give an equally good result.

It is an extremely good thing for many men that this is the case, for I fail to see how the feeble baptism of a septic wool with a 1 in 2,000 solution of perchloride for a very short space of time can have any marked effect on pyogenic organisms. I always thought that the ordinary towels which have been returned from the laundry were probably sterile, inasmuch as they are thoroughly well boiled with plenty of soda, and only handled by the wash-woman, whose hands stand a very good chance of being clean after their prolonged immersion in soap, soda, and hot water. This might not be the case in the city, where the atmosphere is very likely more laden with dust and organisms and their spores. I can only speak of towels taken from my own linen cupboard and those washed in the laundry at Prince Alfred Hospital. Samples taken from the centre of a folded towel yielded negative results. Those taken from the fringe of my own towels almost invariably yielded a short thick bacillus, which I found very prevalent in the dust on any article left in the drying ground. I have lost the record of the organism found on the edge of the hospital towel; however, organisms were always present.

There is one matter which has always interested and vexed me considerably, and that is, the ultimate ending of buried sutures. I have used boiled silk ligatures in the peritoneal cavity some hundred and eighteen times, and on only two occasions did I imagine that the silk was the origin of a septic condition, and only once was the silk returned. On the other hand, when in my earlier cases of hernia I used silk, on four occasions I was fairly positive that the silk was the cause of trouble, and was probably septic. My results were certainly better when I so introduced and tied the silk that my fingers never came into actual contact with that part of the silk which was left in the wound. In cases of hernia this was rather a difficult to accomplish.

The greater frequency with which permanent ligature material gives rise to septic conditions in hernia is probably due to the great number of ligatures, and therefore the great number of chances offered.

Silkworm gut is very easily made sterile, yet it is very frequently a source of great annoyance. I shall mention one or two cases of interest: I operated on a patient for a large ventral hernia. The wound was well dried, and closed without a drain. Union took place by first intention, and as the patient was a very stout woman she was kept quiet for six weeks. I forgot to mention that twelve buried silkworm sutures were used. I last saw this woman two months after operation; the wound was then perfectly sound. At the end of the third month I was told a huge abscess had formed, and the whole of the superficial wound had burst, laying bare the sutures. I was told that all these were removed, but apparently one was overlooked, for two years after the patient came to me with a "tumour." This proved to be a hard, rounded mass, the size of a duck's egg. On section it contained pale gelatinous material, surrounding a free silk-worm gut ligature practically unchanged.

On two other occasions I experienced the same sort of result. Unfortunately, on each occasion I was unprepared to take a culture, though at the same time I was so convinced that this material was aseptic that I simply wiped it out, adjusted sutures, filled the opening with gauze, removed the gauze the next day, and fastened the sutures. No suppuration took place, so I think one might fairly conclude that the material surrounding the ligature was aseptic.

In a similar way I have had a case of resection of the bones of the forearm heal primarily

and the whole arm swell as if about to suppurate over twelve months after. In this case silver wire was used. After the wire was removed no further trouble was experienced, nor did the wound suppurate. On the other hand, many of us have probably had cases where buried sutures have given rise to no trouble whatever, and there are numbers of instances where foreign bodies have remained snugly stowed without giving rise to any symptoms, still there is always that uncomfortable feeling that the non-absorbing foreign body will perhaps cause us untold anxiety and annoyance.

This then raises the question as to whether we may not altogether discard the use of suture material which remains unabsorbed longer than two or three weeks. Suppose we take the case of a hernia or the suturing of an abdominal wound, the sutures hold the surfaces approximated till lymph is poured out. This lymph rapidly becomes organised, showing considerable advance in structure in ten or eleven days. In the mean time the sutures which have been used cannot do otherwise than cause a molecular necrosis at the part constricted, so that frequently in a week's time, the suture is actually loose and of no special importance as far as the permanent union of the wound is concerned. It is true that some absorbable material will disappear in two or three days; this is obviously too rapid altogether. Kangaroo and wallaby tendon for instance needs hardening in formalin or chromic acid if it be required for suture material. Catgut will last somewhat longer if it be placed in perchloride of mercury and spirit for a few hours. Certainly the use of permanent suture material unless in some cases of bone resection is to be avoided. Even the proper approximation of bones can frequently be accomplished with hardened catgut or kangaroo tendon.

I might here mention that I find it most convenient to keep the tendons in skeins of six sorted according to their sizes and put aside in the stock bottle. A few hours before using them, those required should be placed in biniodide of mercury and spirit 1 in 500. This will not materially affect their strength in the time, though a prolonged immersion makes the tendons brittle.

The use of antiseptic dressings I hardly like to touch upon, for I never could understand why a clean cut wound should be dressed in pale pink or pale blue.

The extraordinary faith which some men have in antiseptics, the pleasant confidence which they display as they wash out a wound

which they have not by any means guarded with scrupulous care while operating, is only to be equalled by the æsthetic beauty of the various tinted wools and gauzes which go to form their dressing. The worst of antiseptic surgery is, that the man who practises it will, unless he be extremely careful, fall into the error of disregarding those details which are the very essence of surgical cleanliness, trusting to the routine baptism of antiseptic. If this is likely to be the case with surgeons who are constantly doing major operations, how much more likely will it hold good with the man who does not profess to be cognizant of the minutiae of the best surgery.

On the other hand, the man who believes and practises aseptic surgery, has learnt the difficulty of making things aseptic, the ease with which they are made septic, and the futility of attempting to make a wound aseptic by irritating it with chemicals so weak as to be harmful only to the normal tissues with which they come in contact; for it takes a strong solution under favourable circumstances to seriously damage most pyogenic organisms. If the operator is clean, if the operation area, the instruments and ligatures have been rendered sterile, there is no further need for meddlesome worrying. Let the wound be dried, sewn up and firmly bandaged with a plain, sterilized gauze dressing.

Practising what I have here preached, I have a record of my last thirty-eight major operations with but two failures—one superficial suppuration and one deep. This record is simply due to the method, anyone may do likewise. These, I should mention, were operations in private. In hospital there are so many links to the chain that without the utmost vigilance somebody breaks down, still, unless the operator holds himself responsible for all failure, but little progress will be made.

In justice to surgeons connected with the large hospitals here, one must remember that with eight or nine men operating in one theatre upon all sorts of cases, using the same set of instruments, the same bowls, etc., it would require an extremely well-trained staff to obtain a successful series of cases. A step has been made in the right direction at Prince Alfred Hospital, where a new theatre has been provided for cases which are expected to be septic. Some day, perhaps, each man will have his own theatre, and his own wards, then there will be no excuse, and only the house surgeon will remain as the necessary scapegoat for the errors of his chief.

I am quite aware that I have very probably told many of you nothing new. To those I

humbly offer my apologies, still, I shall rest satisfied if I have roused your interest to a more thoughtful study of aseptic problems.

(For discussion on this paper see page 465.)

EYESIGHT IN SCHOOL CHILDREN UNDER COLONIAL CONDITIONS.

By H. LINDO FERGUSON, M.A., M.D. DUB,
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THE EYE, EAR, NOSE, AND THROAT SECTION
OF THE INTERCOLONIAL MEDICAL CON-
GRESS OF AUSTRALASIA, FIFTH SESSION,
BRISBANE, 1899.

My first duty is to express my thanks for the very great honour which has been done me in placing me in the position of president of this section, a step which I feel is more a compliment to New Zealand than in consequence of any claims of my own to the chair. It is, however, a position which I am very proud to occupy, and which I shall endeavour to fill to the best of my ability. In our individual capacity as members of a great profession we are, from the very nature of our work, and the conditions under which it is performed, rather apt to get into grooves, and becoming engrossed in the occupation which each day brings, to lose the true sense of proportion as regards our own work and that of our fellow-workers. It is the most valuable feature about meetings such as that in which we now have the privilege to be taking part, that we meet our professional brethren, discuss our methods of practice, amend views which were becoming narrow, and regain our power of perspective. The gain to us personally, and to our patients, is very great; but when we are here in our corporate capacity we have to remember that the public look to congresses such as these to speak with an authority such as no individual can exercise on any question which affects the public welfare, and to give such warnings or advice as may help the lay reformer to attack the various abuses which are a menace to that welfare, or are likely to prejudicially affect the health or development of the nation.

Good work has been done in this direction at previous congresses, notably by the section of public health, and I am pleased to say that the result of the discussion on the eyesight of sailors and railway employees at the last congress has been a very real increase in the safeguards of the travelling public.

The subject we are about to discuss is one of the greatest importance. The eyesight of school children under colonial conditions, though it has, of course, been studied by all of us individually in our practices, has never, so far as I am aware, been dealt with by a committee of experts; and if, in the opinion of this section, there are any conditions in school life in the colonies which are calculated to interfere with the future well-being of our colonial youth, it is our duty to speak out clearly on the subject, and indicate to the different Education Boards the manner in which we think the abuses may best be met.

In a matter of the sort, when we have the views of men who have seen the result of education on the eyes of children in different colonies, under different systems, and in different climates, we have a good chance of getting at general principles of reform, and of avoiding confusion of essentials with small details of management, which would be far more difficult to do in dealing with the system of one colony alone.

I do not propose to inflict a statistical paper upon you. I had never thought of such a thing; I have had neither the time nor the opportunity to collect the figures since the selection of the subject for discussion here, and such data as I shall depend upon in my remarks are gleaned from my private case-books of such cases as I have seen in New Zealand during the past sixteen years. Before going through my case-books, although I knew the amount of school myopia to be small, I was prepared, in view of German statistics, to find it much greater than it really proves to be. I found, however, that even by including all cases up to the age of 25 or 26, in which there was a distinct history of the vision having failed during school life, only 2 per cent. of the patients who consulted me in my study could by any possibility be put down as suffering from what we know as school myopia. This is indeed far above the real mark, as from my own knowledge some 25 per cent. of those were cases that might more fairly be termed family or hereditary myopia, of which one family alone furnished seven examples, who inherited the tendency from the mother.

If, in addition to excluding this class, we limit our observations to those who come within the school age proper, I am very near the facts in saying that not over 1 per cent. of the cases that seek advice in the study do so for school myopia in New Zealand.

Failure to see the blackboard is readily noticed, and calls for relief. Probably nearly

all the myopes find their way at some time into somebody's consulting-room; but my experience is that for every case of true school myopia that comes to me, I see more than ten hypermetropes whose eyes have, for one cause or another, failed during school life. If they only form, say 9 per cent. of the pathological conditions, the percentage of myopia must fall to a very small figure when the vast majority of children whose eyes do not break down, and who never come to the study, is taken into account. To check this conclusion, I applied to the lady principal of the Otago Girls' High School, and she has ascertained for me that out of a total of 135 girls there are only eight who have appreciably defective vision, as manifested by wearing glasses, or being obliged to approach the blackboard in class. It does not follow that these are all cases of myopia, but, assuming them to be so, the percentage is under 6, while in the tables given in Cohn's "Hygiene of the Eye" we find that in schools of a similar grade in Germany the average percentage runs from 22 in the lowest form to 58 in the highest.

This freedom from myopia in New Zealand is not in any way due to special precautions on the part of the authorities to prevent it; the lighting of the schoolrooms is not always perfect, there are no desks graduated to fit pupils of different sizes, no particular care seems to be taken to prevent undue approximation of the work, the paper of the school-books is fair, but the print is certainly smaller than an adult would read for pleasure: I can only consider that the small percentage of myopia is due to racial immunity from the condition.

This conclusion is borne out by Mr. Brudenell Carter's statement in his report to the Education Department at home in 1896, that he failed to find evidence of any extended prevalence of myopia in over 8,000 school children examined in the board schools.

Mr. Brudenell Carter found that the ordinary refractive condition among the children was hypermetropia, and if I may draw an inference from the children who have for one cause or another been under my observation in New Zealand, I fully endorse his result, for, though the total number of cases which may fairly be spoken of as having school myopia was only about fifty out of a total of over 5,000 eye cases of all sorts, the number of children of the school age who had hypermetropia and who sought relief for conditions which might have arisen more or less directly from it was over 500. It so happens that in making up my lists I omitted all cases of high degrees of hypermetropia, as I was studying specially

the point of accommodative failure and purposely excluded all cases of 4 D. and upwards, as their accommodative address was independent of school conditions. There were eighty-two cases of hypermetropic astigmatism, 132 cases of concomitant strabismus, ulcers, nebulae phlyctenular conditions and lid troubles with hypermetropia account for 116, but by far the largest class was that which included accommodative troubles with hypermetropia, such as swimming of print, pain on accommodation, frowning, blepharospasm, and similar distresses which were due to accommodative effort on hypermetropic eyes, and required treatment in most cases with convex lenses for reading, either temporarily or permanently. This class totalled 175, and from it were excluded all cases of high degrees of hypermetropia in which such distress would naturally be expected, and all cases in which from the history there was any reason to suppose that the asthenopia was the result of measles or other illness.

The question immediately arises, why should such a large number of children show evidence of insufficient nerve force for the accommodative effort? In the great majority the refractive error was small, in some of the most marked cases not more than 0.5 D., and sometimes even this trifling amount was manifest.

The conclusion pointed to by the figures is clearly not that our children are in danger of breaking down during their school life in the direction of myopia, as is the case in Germany, though when it does occur it is just as difficult to control, but that the tendency is towards the neurotic type of failure, which forms so large an element in the work of our American confreres.

On attempting to analyse the figures in this class, I found that the total number of boys was sixty-nine, and of the girls 107, showing

		Boys.		Girls.	
5	to 6	...	...	3	2
6	" 7	...	...	4	2
7	" 8	...	...	5	5
8	" 9	...	...	7	8
9	" 10	...	...	8	10
10	" 11½	...	...	10	13
11½	" 13	...	...	9	20
13	" 14	...	...	8	18
14	" 15½	...	...	5	19
15½	" 17	...	...	5	7
17	" 18	...	...	5	8
Totals...		...	...	69	107

that the nervous strain was felt much more severely by the girls than by the boys. The most interesting point was brought out in the

comparison of the ages at which the nervous breakdown made itself felt in the two sexes.

The ages are indicated in the previous column.

We see from this list that in boys the incidence of the breakdown increases steadily from the beginning of school life up to the age of from 9 to 10. It then remains stationary till 14, and then is steady at a little more than two thirds of the highest rate, up to the end of the school career. In girls, up to 9 years of age the incidence is less than in boys, but from that age it increases very rapidly, and almost one-third of all the cases in both sexes occur in girls between the ages of 11½ and 15½ years.

The reason why girls between these limits of age should suffer more readily from symptoms of nervous exhaustion than their older or younger schoolfellows is very obvious; but that our present system entails such exhaustion must give us food for much thought as to what the result will be, not only to these children in their adult life but also to their children and the generations to follow. In the large class of cases in which there is in girls past the school age evidence of nervous instability present with anemia, I have often obtained a history of the trouble, having been more or less continuous from the years which these figures point to as being the critical age, and I have often doubted as to whether our educational system was not to blame for the prevalence of that anemia which is so universal among colonial girls.

Inquiry as to why children should feel the strain of their work so much as they seem to do at once brings us face to face with two important factors in our educational system—the first is the promotion of children from standard to standard by examination, the second the system of educational scholarships given in the primary schools.

As long as teachers find that their reputation as successful teachers depends on the percentage of their pupils who pass the examination from one standard into the next at the annual inspection, there will of necessity be a strong temptation for them to cram the pupils for the examination, instead of studying the effect which the high pressure has on individuals. I am glad to say that at present there is a movement on foot to do away with this system in part and to allow a child to pass to a higher standard if it has only failed in one subject, so that it will not be necessary to spend another year over the same English and geography because the child does not come up to the pass standard in arithmetic, but even if

the strain of cramming for the annual pass examination is reduced to a minimum, the evil effects of the scholarship system will still remain. There are every year a number of scholarships given to pupils of the primary schools, the limit of age being 13, which carry free education and maintenance money for two years in connection with the high schools. These are known as the Junior scholarships. In addition to these the Otago High School Board give free education without maintenance money to all such children who at the scholarship examinations fail to secure scholarships but receive more than 50 per cent. of marks at the examination. A second series of scholarships, known as the Senior scholarships, are open, with a maximum age of 15, which carry the children on at the high schools for three years longer, when they are of an age to compete for the University scholarships.

Theoretically, this system is all very well, but its effects are far-reaching, and in many ways undesirable: that the children of the settlers in remote parts should be able to obtain a University education if they show ability for it is a very excellent thing, but the system as it works out in practice means that in each school there are one or more children who are going to compete for the coveted scholarship at the age of less than 13, and they set the level of attainments, which is expected of the rest of the class. A child of exceptional ability, such as the scholarships are intended to benefit, may be able to do the necessary work without suffering for it afterwards, but the penalty is paid by the rest of the class who are doing more work than they are able to do without suffering for it in some way. Quite recently a mother brought me a girl who had broken down at school, and said that her son, a boy of about 13, was in much the same condition, and that his eyes were troubling him very much at night, that he had an extra hour in school, making six hours, and between five and six hours' home work, because there was one boy in his class who was preparing for the scholarship examination, and the work of the class had to be set accordingly. The evil does not end here, for the next class below has to be prepared to take up the work of the scholarship class the following year, and the standard of the whole school, down to the infant class, is regulated by an examination for which the great majority of the children will never enter.

Failure at the Junior scholarship examinations does not debar from entry for the Senior

ones, so that, while all the children who have gained a Junior scholarship are for the next two years working to obtain a Senior one, with the three years' more education that it represents, those who are just below the standard, and have missed the Junior prize, are straining every nerve to get the Senior scholarship, which is probably their last chance of a University career.

I have several times discussed the question of home lessons with teachers, and one teacher of great experience said to me, "I am sure all my children take five hours over their home lessons, and if they had less to do their parents would complain that they were not being given enough work, and that their chances of scholarships were being sacrificed." What is to be said to the parent who thinks an eight-hour day for his own work is one of the laws of the universe, but who insists that his growing children should work ten hours?

I have shown that the nervous stress is felt more particularly by the girls, and that the age for the Senior scholarship examination keeps up the strain to the age of 15. But in the high schools, as in the primary ones, the standard is set by the requirements of the scholarships for which the Senior class have to compete. In this case (the University scholarships) the girls from 13 to 16 are being prepared to enter the sixth form, from which they compete for these scholarships, and in order that you may more clearly understand what this represents, I will give you the course of study for the sixth form of a Girls' High School for last year:—

COURSE OF STUDY, 1898.

Sixth Form (Upper).

ENGLISH.—Chaucer—"The Knight's Tale," "Truth," "Pity," "Parlement of Birds," Shakespeare—"Macbeth," Spenser—"Fairie Queene," Book I., Cantos VII.-X., Milton—"L'Allegro," "Il Penseroso," "Comus." Literature—From Elizabethan to Victorian Period. Historical English Grammar. Composition, etc.

LATIN.—Virgil—"Aeneid," Book I., 110 lines. Livy—Book XXI., 24 chapters. Horace—Odes, Book I.—Book II., 7 Odes, and Selected Satires. Cicero—"In Catilinam," I. and II. Caesar—"Gallic War," Book I., 8 chapters. Tacitus—"Agricola," 36 chapters. Reid's Translation at Sight—Selections. Composition, Grammar, etc. Roman History.

FRENCH.—Chardenal's Advanced Exercises. Krckmann-Chatrian—"Waterloo." Boileau—Poetry. Grammar, Composition, &c. Ninet's Readings for Middle and Upper Forms.

GERMAN.—Schiller—"Maria Stuart" (part). Otto's German Grammar. De La Motte Fouque—"Undine." Goethe—"Faust." Buchheim's German Prose Composition.

MATHEMATICS.—Arithmetic—The whole subject. Algebra—To Permutations and Combinations, inclusive. Geometry—Euclid, Books I., II., III., IV., VI. Trigonometry—Lock's Trigonometry.

SCIENCE.—Botany—The Morphology and Physiology of the Botanical Types specified in the Junior Scholarship Schedule. Chemistry—The Metallic Elements—Revision of the Nonmetallic Elements.

This means practically that when the girls have passed through this form they have been educated to all intents and purposes up to the standard of a pass B.A. degree, which is the level they are supposed to attain after a further three years at the University.

The result of this work for the school is that from one to three University scholarships are won by girls from this form, and appear in the list of school prize winners, the private schools which are competing with the high schools have to educate their girls to the same standard, and seeing that the preparatory work for the last year's course has to fall on the children when my observations show nervous breakdown to be most common, and I think you will see that the explanation of the breakdown lies not so much in any inability of healthy children to face a physiological change naturally under normal conditions, as in the undue nervous effort during that change caused by the standard of education which the scholarship system entails. The matter is one which affects the future of the race, chiefly as it touches the girls, and it is our duty to educate the public to see that between the ages of 12 and 15 years girls undergo developmental changes which make it exceptionally hard for them to face the call of extra educational work, and yet this is the period at which the New Zealand scholarship system taxes them most severely. It is no answer to such a criticism to say that many children take their scholarships and get through their education apparently without harm; we have, in looking broadly at the question as affecting the public health, to consider the amount of harm done to those who do not get the prizes, by having to work alongside those who do. Colonial parents have a very laudable desire to so educate their girls that they may be able to support themselves. Those who have not the means to prepare them for a profession as a rule wish them to qualify themselves as teachers, in either case they are anxious that the child's education should proceed as fast as possible. To ask that for three years, from 12 to 15, their education should proceed on very much modified lines is to invite an outcry such as would be raised if one urged three years' military service for every boy from 18 to 21, but the slow process of evolution which

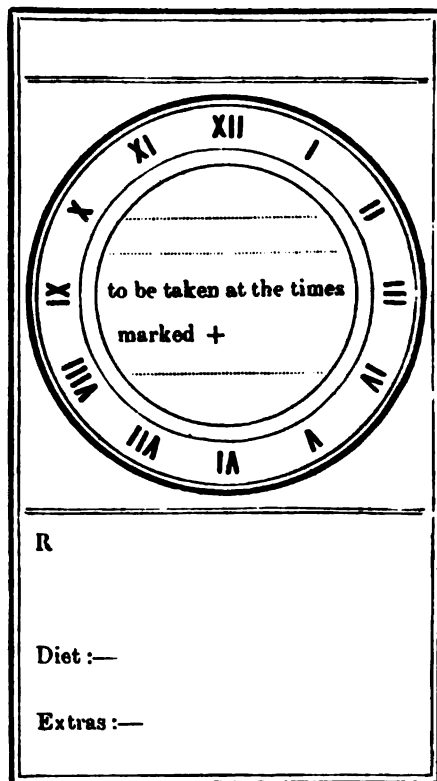
has during countless ages made girls what they are has done so not to make them teachers of backblock schools, but the mothers of generations to come. Injudicious education may very easily render them unfit to fill the part which Nature destined them for, but it is our place to utter a note of warning as to what the future results will be. I am quite prepared to accept the statements which we hear that girls up to 10 or 11 are much quicker to learn than boys. I am not anxious to enter into any argument with those who hold that women can hold their own in any intellectual field with men, but I am convinced that during the time which covers the developmental changes which convert a child into a woman girls cannot compete with boys in the matter of education without serious detriment to their own health and without serious risk of transmitting to their children some neurotic disability which will prejudicially affect the stamina of the race. It is the custom in New Zealand to send children to school at a very early age, 5 years, or even less. The teachers say that the parents send the children as soon as they can walk to school to get rid of them for so many hours in the day. Personally, I am of opinion that at the age of 9 they are no further advanced in their studies than if they had run wild till the age of 7; but I have not satisfied myself that any ill-effects either to the eyes or nervous system results from the custom, and the parents have a certain amount of reason in the contention that they are kept out of mischief. The main blot on our system is that to which I have referred at such length, and I should especially like suggestions for its removal. My own view is that as scholarships will continue to be granted, there should be only one class given, with a currency of five years, and that the age limit should be 11, the standard being proportionally reduced. The scholarships might be deferred so that the children should not go to the high schools till they were 12 or even 13, although the examination had been passed one or two years previously. This would avoid competitive examinations during the critical period of the children's lives. For the three years from 12 to 15 I would much reduce the mental work, confining it to English subjects, and devoting the time to instruction in sewing, cookery, dressmaking, knitting, and other such feminine accomplishments as do not come into a University curriculum, but are nevertheless of much value if the girl, instead of becoming a teacher, becomes a wife. I should also during this three years insist on a large amount of

outdoor exercise—tennis, hockey, baseball, cricket, swimming, golf, gymnastics when outdoor exercise was impossible, anything that would help to promote the physical development at the time when it is most in need of the healthy stimulus of those physical recreations which boys have, but which girls have not. At 15 the amount of studies might be increased, and if by 18 they are not fit to enter the University, I have no hesitation in saying that they are making a mistake in trying any longer to do so. It may be that such a change in the system as I have outlined, would result in some being excluded who now become teachers, but I am convinced that great good would result to the majority. The statement that the battle of Waterloo was won on the playgrounds of Eton and Harrow may not be strictly accurate, but it contains a great truth; in the great battle of survival of the fittest, whether our race is to figure as a strong healthy, vigorous nation, or as a weedy, neurotic, decayed one, depends very largely on the stamina of the mothers of the future, and it may be that the battle will be won on the playgrounds of our girls' schools.

It may, perhaps, be thought that I have travelled, in my remarks beyond the subject which we are to discuss to-day, but I do not think that this is the case. It is in the ordinary routine of our day's work to be consulted by people who say they want glasses for reading, and after examining their eyes we find ourselves confronted with the task of breaking to them the news that their failing sight is due to Bright's disease or diabetes, to poisoning of the nervous system by alcohol, by tobacco, by lead in their water supply; that it is due to early locomotor ataxy or other serious form of nervous disease. Our work is inseparably bound up with the study of nervous derangements and degenerations; if we find that a man's failing sight is due to early general paralysis, we do not hesitate to take what steps seem best calculated to safeguard the interests of the patient and his family; if we had a number of cases of saturnism from one district we should feel bound to inform the sanitary authorities, and protect the public health; if we find that the stress of our educational system is pressing unduly on the nervous system of the mothers of the next generation, it is our duty not to content ourselves with ordering a pair of glasses for reading and a tonic, but to enter a protest against the perpetuation of methods which menace the future of our children, and to an unascertainable degree, the nervous balance of their heirs.

AN IMPROVED MEDICINE LABEL. By SAMUEL T. KNAGGS, M.D., &C., SYDNEY.

We frequently write prescriptions and give instructions regarding the quantity of medicine to be used and the periods at which each dose shall be administered, but, unless a trained nurse be in charge of the case, it is often very doubtful if our instructions are faithfully carried out. This is especially the case when the nursing is conducted by friends, relatives, or members of the family, especially when frequent changes take place in the individuals in charge of the case. Under such circumstances, when a dose of the medicine has to be given every three, four, or six hours, an uncertainty exists as to when the last dose was administered. This may be caused by change of nurse, inattention, or carelessness. A similar uncertainty may occur in a large ward of a general hospital containing from ten to forty patients, not from any carelessness, but simply from the puzzling variety of times at which the various patients have to be given their doses of medicine.



This so impressed me in 1875, when, being a member of the honorary staff of the Newcastle (N.S.W.) Hospital and conducting an

extensive practice in the city and district, I designed the foregoing label.

How to use this label for hospital, private, or club practice is obvious. The blank space across the top is for the name of the hospital or patient; the double ring space inside the clock-dial figures is for placing the + underneath such hours as the dose of medicine is to be administered; the bottom space for the prescription, diet and extras will be found very useful for hospital and club cases, but for private patients this portion can be cut off if deemed necessary.

Samples of this label can be obtained from Mr. John Sands, of 374 George Street, Sydney.

THREE CASES OF INTEREST—I. LAPAROTOMY FOR OBSCURE ABDOMINAL SYMPTOMS. II. DEFECTUS UTERI. III. CYSTS OF BROAD LIGAMENT.—OPERATION—CURE.

BY H. G. H. NAYLOR, L.R.C.S., L.R.C.P.
EDIN., AUCKLAND, N.Z.

I.—LAPAROTOMY FOR OBSCURE ABDOMINAL SYMPTOMS.

MR. P—, a farmer, aged 44, came to my consulting room on May 25th, complaining of pain in the left side. He had consulted two other practitioners, who told him he had a tumour, and had prescribed for him two months before, but not being improved came into town again to see me.

He had received a kick in the abdomen while carrying a sheep about five years ago, and was laid up for a few days at the time, since which he has always had a pain in the left side, which has got much worse lately, incapacitating him for work every now and again. Riding, driving and walking long distances always gave him pain.

I examined him, and found no signs of a tumour, but as the symptoms were not definite enough I told him that, although he had no tumour, there was some obscure condition which would be rectified most likely by an exploratory operation. He consented, and went into a private hospital.

On the 27th I opened his abdomen sufficiently to introduce my hand for examination, and found the descending colon bound down by a series of firm adhesions, which I separated with my fingers and three adventitious bands like tape right across the bowel, and binding it down. These were divided one by scissors and the others by my fingers. I was then able to bring the bowel out of the wound and examine

it. Finding it quite healthy I returned it, and closed up the abdomen. He made an uninterrupted recovery, and left the private hospital on the thirteenth day after operation, and I am told is now engaged in busy farm work, and has never had any pain since I last saw him.

This operation shows the advantage of exploratory operation in cases with obscure abdominal symptoms.

II. DEFECTUS UTERI.

Absence of the uterus is a rare enough condition to excuse me for describing this case. An unmarried woman, 26 years of age, living in the country, came to consult me, as she had never menstruated.

She appeared in excellent health, rosy cheeks, active in movement, and almost robust. She was quite womanly in appearance, having a well-developed bust, and what might be termed a good figure. Once, some years ago, she said, she had a bleeding for a day or two, but no sign of any since.

On examination there was no sign whatever of hermaphroditism, the external genitals being quite normal as to labia, clitoris, vaginal orifice, but the pubic region was as bare of hair as a newborn baby's.

The vagina was as usual, except that at the upper end there was absolutely no cervix, and no orifice or nodule of any kind, but just a smooth even *cul de sac* like the end of a glove finger. The vagina was quite roomy; there was no hymeneal membrane, which made me suspect that the young lady was not quite void of sexual desire, and had been broached. I did not ask her any questions of this nature, but should like to have known if desire existed, as this would have suggested the existence of some sort of ovaries. I searched for a womb, but could not feel any sign of one either by vagina or rectum. She thought medicine would make her unwell, but I explained her condition to her, and told her no medicine would be of any use.

III.—CYSTS OF BROAD LIGAMENT—OPERATION—RECOVERY.

About four months ago I was asked by a practitioner to see a patient with him in consultation.

Miss H., 44 years of age, born in New Zealand, was examined by me in the presence of her medical attendant.

She presented the following symptoms:—She was very thin, pale, and nervous; pulse small and frequent. The abdomen was enormously enlarged. Abdominal palpation revealed two distinct tumours, one on the right

side quite movable, the other median, large, reaching to above the umbilicus, and filling up the abdomen down into the pelvis. There was also a good deal of peritoneal effusion of fluid. No history of cancer or tuberculosis. Her abdomen had been getting larger for some years.

Examination per vaginam gave one the impression that it was a large fibroid myoma of the uterus. This and the median position of the growth in the abdomen caused one to diagnose the case as such, with a tumour growing from its surface on the right side.

She had consulted other men fifteen months before, and they came to the same conclusion, and advised that an operation would be inexpedient, and treated her for some time with ergot. Although she now looked very exhausted, I advised operation soon, after telling her that it was serious, and explaining the risks. She decided on operation, and went into a private hospital at once, where for a week she was fed up and prepared very carefully.

On the 28th March, the patient having been prepared, I operated, opening the abdomen by an incision about six inches long, came on the movable tumour, a cyst about six inches in its longest diameter, and attached to the main tumour by a flat, broad pedicle, and supplied from it by very large vessels. Having tied the pedicle in halves I removed the cyst, and on examining the main tumour found it to be solid and adherent to the parietal peritoneum all over the pelvis and very largely behind, so that I could feel no part of its posterior relations. Its size made it very difficult to get down to the pelvis at all, but the broad ligaments on both sides seemed covered with hard nodules. Thinking from this that there was malignant disease (which I also thought accounted for the patient's prostrate, emaciated condition and general cachectic appearance) I decided not to proceed further. About a gallon or so of peritoneal fluid escaped during the operation. I buried the incision in three layers, two of buried sutures and one of external cutaneous.

I have gone into full details to show how my diagnosis was wrong, as will be seen later on. She recovered very well, and left hospital in three weeks. For two months I kept her under observation, and found as the result of the operation that instead of growing weaker she steadily improved in health and weight to a marked degree.

I came to the conclusion that I was mistaken as to the malignancy of the deposit on the broad ligaments, and proposed to the patient as

she was so much stronger that she might allow me to attempt to complete the operation, and she consented.

She went into a private hospital on the 7th of July, and on the 9th I operated.

I cut along the cicatrix, and prolonged the incision about an inch higher and lower than before. I found several adhesions between the growth and the abdominal wall which were thick and vascular enough to require division between ligatures. Having all in front, I began to separate the posterior attachments, and this was a very serious matter, as everything near seemed glued to the growth. In front since the first operation a more cystic character appeared to have taken the place of the solid nature of the growth in front. I punctured the cyst and emptied it of clear fluid, and then came on a more solid tumour under this cyst. As I was separating the adhesions behind, having cleared a good deal of the surface from the adjacent intestines little by little, my finger went through a thick solid cyst, which was about an inch and a half thick, from which escaped a quantity of milky fluid, and as I could not separate any further I left a portion of the cyst wall attached to the bowel rather than endanger that viscus. I then found adhesions as deep into the pelvis on the right side as I could reach, and separated all this, and then attacked the left side, and at last came to the pedicle here, which was thick and broad. It was divided in two parts, and the whole growth removed, and only then was I able to get to the pelvis at the back, where I found the uterus and appendages all firmly packed by adhesions and pressure like sardines in a tin. Having attended to the peritoneal toilette, I washed out the abdomen with a large jug full of a saturated solution of boric acid in sterilised water, sponged out, and then stitched up the parietal peritoneum with a continuous suture and the more superficial with interrupted sutures, using catgut for the peritoneum and silk-worm gut for the outer parts, and dressed with iodoform gauze.

She was very low during the operation, and had to receive ether and strychnine subcutaneously three times. Equal parts of ether and chloroform were administered at my request by Dr. Grant, who administered the anæsthetic very creditably as the operation lasted about two hours and a half.

The temperature was very nasty for a week or so, and then became normal for a few days, and then rose again. Her bowels were attended to daily, so I was at a loss to account for a second rise, until I examined

her rectum, which I found loaded to an enormous extent. As soon as this was rectified her temperature became normal. She left the hospital in four weeks.

What I took to be a fibroid was this large cyst with thick walls and very small cavity, filled with a substance that looked exactly like boiled sago, and as I could only get to the uterus at the end of the operation I only discovered my mistake while operating the second time.

As these three cases have occurred in my private practice here I thought they were worth recording.

REVIEWS.

SKIAGRAPHIC ATLAS OF FRACTURES AND DISLOCATIONS, WITH NOTES ON TREATMENT, FOR THE USE OF STUDENTS. By Donald J. Mackintosh, M.B., Medical Superintendent of the Western Infirmary, Glasgow. London: H. K. Lewis. Glasgow: John Thomlinson, 1899. Price 12s. 6d.

This is a demy-quarto atlas, containing 80 admirably executed electro-photographic skiagraphs, which have been gradually accumulated in the course of the author's work in X Ray photography at the Western Infirmary, Glasgow. The publication is admirably suited not only for the student, but for the practitioner in active work. Each plate is accompanied by descriptive notes, which give a concise description of the injuries portrayed, as well as a brief synopsis of the recognised treatment, and other useful information. We can emphatically state that this is the best atlas of the kind that has come under our notice up to the present date. The delineation of the injuries is most clearly made; all the subjects of illustration have evidently been selected with great care, and taken in excellent positions. Among the contents are to be found skiagraphs of the normal hand, arm, and foot, taken for the purposes of comparison, also numerous and diverse forms of fractures of almost every bone in the human frame, some of which are taken from two or more points of view. Separation of the lower epiphysis of the humerus of a child, dislocations of the various joints, from those of the phalanges to the larger joints of the human body. There are also skiagraphs of cases of sarcoma, tuberculosis, and many foreign bodies, such as bullets, coins, needles, etc., in the different structures and tissues. This is a work that should find a place in the library of every physician and surgeon.

SELECTED PAPERS ON STONE, PROSTATE AND OTHER URINARY DISORDERS. By Reginald Harrison, F.R.C.S., Surgeon to St. Peter's Hospital, etc., etc. 190 pages 8vo., with 15 illustrations. London: J. and A. Churchill, 1899.

This little book consists of some sixteen articles, which have for the most part appeared since the publication of the fourth edition of the author's work on the "Surgical Disorders of the Urinary Organs," which is now out of print. The articles are all of interest to the general practitioner as well as to the operating surgeon. In the article on "A Further Contribution to the Surgery of Stone in the Bladder" a table of 110

operations for primary stone in the bladder, performed between 1890 and 1897, is given. Of these 101 were treated by litholopaxy, 3 by perineal lithotritry, 2 by supra-pubic lithotomy, and 4 by median lithotomy and drainage. The article on "The Treatment of Prostatic Obstruction, with Special Reference to Vasectomy," is full of interest, and the author considers that benefit has followed in most of his cases of vasectomy; although he points out that it is useless in certain forms of enlargement. In an article on "Large Pelvic Hydatid Treated by Perineal Incision and Drainage," frequent reference is made to two cases of pelvic hydatid reported by Dr. Sawkins in *The Australasian Medical Gazette* for November, 1893. Amongst the illustrations is a figure of a modified lithotrite, in which a cross-bar replaces the usual wheel.

A TEXT-BOOK OF PATHOLOGY. By Alfred Stengel, M.D., Instructor of Clinical Medicine in the University of Pennsylvania, Clinical Professor of Medicine in the Women's Medical College, Physician to the Philadelphia Hospital, etc., with 372 illustrations. Second edition, 1899. Philadelphia: W. B. Saunders. Melbourne: James Little. Sydney: L. Bruck.

The fact that this book has reached its second edition within a few months of the issue of the first, speaks very highly in its favour. The aim of the author has been to try and present the subject of pathology in as practical a form as possible, specially from the point of view of the clinical pathologist. The groundwork of this book, demy-octavo, containing 809 pages, was first utilised as a basis of demonstrations upon clinical pathology for students of medicine, so that prominence was given to pathology and physiology, and the discursiveness and citation of authorities avoided. The author has made full use of other works on pathology and of special monographs by English, French, and German writers, which he has fully acknowledged. The book is divided into two parts: 1st, General Pathology: Etiology of disease; disorders of nutrition and metabolism; disturbances of the circulation of the blood; retrogressive processes; inflammation and regeneration; progressive tissue-changes; bacteria and diseases due to bacteria; animal parasites, and diseases caused by them. 2nd, Special Pathology: Diseases of the blood; diseases of the lymphatic tissues; diseases of the circulatory system: diseases of the respiratory system; diseases of the gastro-intestinal tract; diseases of the ductless glands; diseases of the urinary organs; diseases of the reproductive organs; diseases of the bones; diseases of the joints; diseases of the voluntary muscles; diseases of the brain and its membranes; diseases of the spinal cord and its membranes; diseases of the peripheral nervous system. The letter-press of this work is very clearly printed, and all the headings are of block type. The plates and illustrations are in the highest style of art, the majority of them being electro-photographic reproductions from the original subjects.

LINNEAN SOCIETY OF N. S. WALES.—Intimation is hereby given that the Macleay bacteriologist, Mr. R. Greig Smith, M.Sc., is now established at the Society's Hall, Elizabeth Bay, in a laboratory fitted up with every modern appliance for bacteriological investigation. The annual subscription to the Society is one guinea. Members elected during the current year are not required to pay the usual entrance fee. J. J. Fletcher, Secretary.

INTERCOLONIAL MEDICAL CONGRESS OF AUSTRALASIA.

FIFTH SESSION, 1899.

(Extracted from the *Brisbane Courier*.)

THE fifth session of the Intercolonial Medical Congress of Australasia was held at Brisbane from the 18th to the 23rd (inclusive) of September, 1899. The officials connected with this congress were announced in our August issue.

Church services in connection with the congress were held in several of the churches on Sunday, the 17th September. At St. John's Pro-Cathedral there was a very large attendance in the morning. The sermon was preached by Coadjutor Bishop Stretch, while his lordship Bishop Webber and Canon Hay took part in the service. At the Wharf-street Congregational Church, in the evening, the Rev. Hugh Jones, M.A. (pastor) took for the subject of his discourse, "A Healthy and Holy Humanity," which he treated in a very able manner. The Rev. C. E. James preached at the Albert-street Wesleyan Church in the evening, when he took for his text Isaiah xxxiii., 24, "And the inhabitants shall not say, I am sick; the people that dwell therein should be forgiven their iniquity." In St. Paul's Presbyterian Church the Rev. T. Nisbet took his text from Ephesians vi., 8—"Whatsoever good thing any man doeth, the same shall he receive of the Lord, whether he be bond or free." The title of the subject was, "A Doctor of the Old School," the remarks being based on Ian Maclaren's sketches under that title.

On the afternoon of Monday, 18th September, members of the congress were formally received by the Mayor and Mayoress (Alderman and Mrs. Seal). There were upwards of 150 ladies and gentlemen present, and the function was a very pleasant one. At intervals Mr. Sampson played selections on the grand organ, a feature which added in no small degree to the enjoyment of the afternoon.

The MAYOR, who was supported on the platform by Dr. John Thomson (president) and Dr. Love (secretary), gave the members of the congress a hearty welcome to Brisbane, and expressed hopes that the work of the congress would lead to enduring results.

Dr. THOMSON, on behalf of the medical profession, thanked the Mayor for his courtesy and hospitality.

Afternoon tea and light refreshments were served in a marquee erected in the grounds.

In the evening, Dr. JOHN THOMSON read his inaugural address at the Centennial Hall. (Address will appear in a future issue.)

The ceremonial opening of the congress took place in the Centennial Hall on the evening of Monday, 18th September, when, despite the inclemency of the weather, a distinguished company assembled to welcome the visitors. On the platform, among others, were: His Excellency the Governor and Lady Lamington, His Excellency the Hon. G. Le Hunt, his Honor Sir S. W. Griffith, C.J., and Lady Griffith, the Premier (the Hon. J. R. Dickson), the Right Hon. Sir Hugh Muir Nelson, the Bishop of Brisbane, Rev. T. Nisbet, Mrs. J. Thompson, the Mayor of Brisbane (Alderman W. Seal), Major-General Gunter, Hon. Dr. Taylor, and numerous others. The chair was occupied by Dr. John Thomson (president of the congress). At the invitation of the president, His Excellency the Governor declared the congress open and welcomed the visitors in an eloquent speech.

The fifth session of the Intercolonial Medical Congress of Australasia was formally opened on the

morning of the 18th September at the Technical College, Ann-street, Brisbane. The president (Dr. John Thomson) occupied the chair, and there were present about eighty-two members who had signed the roll.

Dr. THOMSON, in opening the proceedings, cordially welcomed and thanked the members for the distinguished honour that they had conferred upon him in electing him their president.

The SECRETARY (Dr. Wilton Love) read the report of the Executive Committee as follows:—"On the last day of the New Zealand session of congress, in February, 1896, it was decided that Brisbane should be the seat of the next congress, and that the president should be John Thomson, M.D., of Brisbane. In pursuance of this mandate a general meeting of the profession was held in May, 1897, as a result of which office-bearers and Executive Committee were appointed from the two medical societies in Brisbane, necessarily from residents of Brisbane. District representatives for five divisions of the colony were also appointed. Of these latter, we regret that one, Dr. Scholes, of Goodna, did not live to see the completion of the work—his place has been ably filled by Dr. Hogg. In March, 1898, the real work of the Executive Committee began. The same gentlemen who acted as local secretaries in the various colonies have again assisted us with the exception of Western Australia, where Dr. Athelstan Law has taken Dr. Harvey's place. In Adelaide Dr. Poulton, Melbourne Dr. Symes, Sydney Dr. Muskett, Hobart Dr. Sprott, and Dunedin Professor Scott, have rendered us valuable assistance, without which our work would have been interminable. A guarantee fund was established. The patronage of Her Majesty's representatives in all of the colonies and the Admiral on the Australian station cordially acceded to the request to become patrons of the congress. The Queensland Government was approached, and substantial assistance was promised by the Premier; and concessions were obtained from railway authorities in the other colonies and from steam shipping companies. In June, 1898, Dr. Hardie resigned his position as joint general secretary, and early in this year Dr. Jackson succeeded from the committee. The work of congress has this time been divided into six sections, the subject of eye, ear, nose and throat being promoted to the dignity of a full section. The response to papers has been liberal in all save the anatomy section, where we have not succeeded in obtaining either papers or president, doubtless due to the absence of a school of medicine in Brisbane. Three matters were referred by the Dunedin Congress to the Brisbane session—(1) The question of a fully representative medical journal for Australasia; (2) the establishment of a dental section; (3) the question of the Contagious Diseases Act. With the first matter the Executive Committee have not interfered. As regards the establishment of a dental section, it was thought desirable to recommend to congress that so long as the registration of the dental profession in the various colonies was in its present imperfect condition the establishment of a dental section was hardly feasible. Regarding the C. D. Act, this was advised to be referred to the public health section to deal with. Finally, the Government have consented to issue free passes to members and wives for a period of one month, available over all Queensland lines." (Applause.)

The Hon. Dr. TAYLOR (treasurer) read the balance-sheet of the previous congress, showing total receipts amounting to £439 13s. 8d., and a credit balance after the payment of expenses of £54 3s. 11d. In welcoming the visiting members, he said he could assure them

that they were all very glad to see them, and would do all in their power to make their stay a pleasant one. (Applause.)

On the motion of the **PRESIDENT**, seconded by Dr. **LINDO FERGUSON**, the report and balance-sheet were then adopted.

DENTAL SECTION.

Some discussion took place upon the question of establishing a dental section in connection with the congress. The matter had been referred from the last congress, and the **SECRETARY** (Dr. Wilton Love) stated that formal application had been made for establishing the section. After considerable discussion, in the course of which some members favoured the request and others strongly opposed it, the **PRESIDENT** held that under the constitution of the congress they had no power to establish such a section. The matter accordingly dropped.

THE C. D. ACT.

The **SECRETARY** read a memorial from the Women's Christian Temperance Union of Australasia, asking for the co-operation of the congress against the proposed extension of the C. D. Act in Queensland, and in favour of the repealing of similar Acts in Tasmania and New Zealand. This also, as the **PRESIDENT** put it, was a heirloom from the previous congress, at which, after being referred to the public health section, it was referred to the present congress. The manner in which some portions of the memorial were received indicated that some of the members had some difficulty in regarding them quite seriously.

Dr. **LINDO FERGUSON** (Dunedin) moved that the matter should be referred to the public health section. It was a matter which could be better "licked" into shape by experts in public health than by general discussion.

Dr. **CROWTHER** (Hobart), in seconding the motion, said he had taken an active part in Hobart in passing their Act through the Legislature, but if it had to come up again he would not help it at all. He believed that it placed most dangerous and arbitrary powers in the hands of ill-disposed women and very dangerous powers in the hands of the police. That was his impression. He was not at all satisfied with the working of the Act in his colony.

The motion was then agreed to, and the congress adjourned until ten o'clock on the following morning.

SECOND DAY'S SITTING.

The sitting of the Medical Congress was resumed at the Technical College on Tuesday, 19th September.

SECTION OF MEDICINE.

The work of the congress was opened in the Section of Medicine, under the presidency of Dr. R. Scot Skirving, of Sydney. There were about 120 members present, including three medical students.

Dr. **SCOT SKIRVING** delivered his inaugural address. After thanking the members for having placed him in the presidential position, he said he felt that he had received a great honour. The subject upon which he proposed to offer a few remarks was "The Influence of Modern Methods on the Practice of Medicine." He thought they must all agree with him that to be a good physician, "to practise a sublime art not frivolously," one must be grounded not only in the sure foundations of anatomy, physiology, and pathology, but likewise habits of close clinical observation must be cultivated, patient ordering of facts noted, combined with a shrewd sifting of chaff from grain, before finally

arriving at a diagnosis, or a method of treatment. Especially was it necessary to arrive first of all at a working diagnosis. He was far from sharing the view of an old Scotch lady, who wanted a change of medical adviser because her own doctor "wasna able to pit a name to her tribble." (Laughter.) Still, he would urge that a strong effort be made to reach some definiteness of diagnosis in every case. The frame of mind of the man who was content to tell the patient that so and so "is suffering from an irritation in the neighbourhood of the stomach," as an excellent old practitioner in Sydney used to do, was not one to be imitated. He would urge and reurge his hearers, especially those who still had the happiness to be young, to make themselves masters of, and by habits of constant observation to retain the best possession of their fathers in medicine, clinical observation of signs and symptoms, and avoid the tendency of this progressive age of flying after new things to the forgetting or disregarding of the old and tried. He did not speak as a reactionary or as one who did not hail with joy the rapid advances in medical science, but he wished to sound a note of warning that they were somewhat inclined to run riot in their new learning, and to forget "the long result of time" which had led to their present vantage ground. Take tuberculosis—he regarded the discovery of the tubercle bacillus as one of the greatest in the history of medicine, and its discoverer as one of the greatest of men. Nevertheless, the examination of the sputum of tubercle bacillus and other micro-organisms to establish the diagnosis of tuberculosis, or of a mixed infection, was not quite the be-all and end-all of the inquiry into a case of phthisis. He, therefore, suggested to the rising generation that inspection, palpation, percussion, and auscultation, so likewise an attentive ear to the personal and family history, might be found useful aids in arriving at a conclusion in the absence of the microscope and suitable stains. As to the use of tuberculin, he regarded it as a land mark in therapy almost as epoch-making as Jenner's immortal discovery, but its merit seemed just now to lie more in its suggestiveness of great things to come, of an ever-widening arc of therapeutic possibility rather than at the moment of a successful method of cure. In that connection, as well as towards new remedies generally, a wholesome attitude of waiting for light, if not carried too far, was, to his mind, the best for the profession, and for the public as well. Synthetic pharmacy had flooded us with a hundred substances with three-decked names. A few, a very few, were likely to be of a permanent value. The greater number in company with countless vegetable preparations with American testimonials were equally lauded and equally useless. While on the subject of new remedies, there was another development in the matter of pharmacy which had its bad powers as well as its good. It was this—that the trend of modern drug-giving was to hand over a part of their business to the manufacturing chemist. While he agreed that the poly-pharmacy of the past was often unscientific and harmful, he deprecated their letting slip their knowledge of rational pharmacy. He utterly disapproved of the man who had a prescription handy for every ill that flesh is heir to. That type of man the late Professor Badham once defined "as a fellow who prescribes drugs, not a doctor." He now occasionally saw prescriptions such as the following:—Pil. 429 1 (a)—(Laughter)—mist xy (my formula), and the like: He did not know that there were so many pills in the world. (Laughter.) That kind of prescribing no doubt saved time, but there was something mysterious,

something not to be understood, except by the prescriber and his special chemist, about it which grated on his sensibilities, and which seemed contrary to the best traditions of their profession. They all learned at times from the practice of each other, even from a casual prescription, and he must be honest and confess to a reasonable curiosity as to what the last doctor ordered. (Applause.) One of the glories of medicine was the information the microscope revealed to us in pathological anatomy, but he must again insist on the value of the clinical aspect as a right balance to the microscopical examination. Mr. Mayo Robson had lately published an admirable address on "The Dangers of Delay," with which he was in entire sympathy, but he was equally sure that a very good homily might be preached on "The Dangers of Precipitancy." In no former period had medicine and surgery in one sense been so closely interwoven. Surgery, as they all knew, now invaded territories long sacred to the pure physician, and that overlapping was well, but with it, and with the astonishing success which asepticism and anaesthesia had brought, there was a risk of their forgetting that after all an operation was a great and sorrowful evil. He was sure that in some cases operations were embarked upon in too light a spirit, and without the weighty justification which such measures ought to demand. Just as in matters purely medical there was a seeking after a short and sometimes not "a more excellent way," so in those cases where medicine and surgery were alike concerned there was at times a precipitancy, a lack of effort to get at the bottom of affairs, by clinical examination, a too easy settlement of doubt by an incision. Palpation and percussion might some day become obsolete knowledge, and Dr. Cope's forecast of the "Clinician" of the future, sitting out of employment, alone with the stethoscope he had fondled for years draped in black, had some justification. (Laughter.) In the hands of a skilled few a justified precipitancy might do no harm, but in the hands of the many, nearly as great evils might arise from precipitancy as from delay. Therefore he held that they should exercise a wise conservatism. Let them by all means operate as early as possible in suitable cases, but let them at least try their best to make out what was a suitable case before doing so. (Applause.) There was at present a tendency to hanker too much after the dramatic and larger events of medicine and surgery. So it was well to remember that the bulk of the profession would be occupied more often with the humbler details of practice. They did not live for themselves, but for their patients. As Louis Stevenson finely said, their mission was "to bring air and light into the sick-room, and often enough, but not as often as we wish, to bring healing." It was right, then, that what they often did, they should try to do well. Little minutiae of practice were all important in making a sound and useful practitioner. There was nothing mean in such knowledge and such things. He liked to recall good George Herbert's pious lines, in which he said that a right spirit

"Makes drudgery divine,
Who sweeps a room, as for thy laws,
Makes that, and the action fine."

(Applause.) He was beginning to doubt if the diffusion of information on every conceivable subject of the masses was an unmixed blessing. They were getting too many half-educated people in every walk of life, and, above all, concerning their own, where every ignorant know-all in the street thought he was a capable critic of things medical. One must either weary oneself by trying to tell such persons the whole

truth if they will take it in—or else leave them to their own wrong opinions to worry their doctors. As it was just now, many neurotic women, some of the clergy and lady-like men generally, all usually persons with a little knowledge, which is dangerous, swelled the ranks of anti-vaccination and anti-vivisection propaganda. The people who really understood these matters made no sign. And he would add that the very ignorant, to their credit, usually accepted their guidance in matters absolutely their own. But it was that self-educated class which gave medical men trouble—not only in great questions, such as vaccination, which affected a nation's welfare, but also in the parochial details of seeing patients. Cheap science and amateur medicine-mongering gave some of the laity the idea that they knew a great deal; and the result was that medical men were forced not seldom to treat the patient's fussy friends as much as the sick man. Time did not permit him to speak of good remedies passing into disuse. It was a theme already well handled in many addresses. It was enough for him to refer to the extinction of some of them as one of the many-sided effects of modern methods on our pocket. But not always did the fittest survive—nor was the early disappearance of the good an unknown event. In these remarks he simply wished to draw attention to the risks which went with successful advance. Let them hail all solid new knowledge with acclamation; but let them still hold fast to that which was proven and good—

"Lest we forget, lest we forget."

(Prolonged applause.)

Dr. THOMSON said he thought that he only expressed the feeling of the meeting when he said they had enjoyed an intellectual feast. (Applause.) The matter had been dealt with in a most scholarly manner, and in a way in which he was sure had appealed to them all. He thought Dr. Scot-Skirving had applied the brake to the medical buggy pretty effectually. He begged to move a very hearty vote of thanks to him. (Applause.)

The motion was carried by acclamation.

Dr. SCOT-SKIRVING, in returning thanks, said that he had feared that some of them, especially the younger members, would think him a bugbear and a reactionary; but the kind way in which they had received what he had said had shown him that they did not regard him in that light. What he wanted to show was that, while they were an essentially progressive profession, still there was good balance. He did not like to use the brake sentiment, but yet that was practically what he meant, and he gladly adopted Dr. Thomson's expression. He thought an occasional application of the brake would do a great deal of good. (Applause.)

The members then divided into sections. In this particular section papers were read and discussed, as follows:—"Notes of a Case of Primary Carcinoma," by Dr. J. R. PURDY; "On Excretion of Water and Urea in the case of a Patient with one Kidney," by Dr. J. B. NASH; and "On Complicating Infections," by Dr. A. C. F. HALFORD.

SECTION OF SURGERY.

Papers were read and discussed as follow:—"On the Treatment of Hydatids by a Modification of the Closed Method," by Dr. WOLFHAGEN, for Dr. J. RAMSAY; "Review of Hydatid Disease," by Dr. R. SCOTT; and "The Treatment of Severely Crushed Limbs, and the Operative Treatment of Hydatids situated low in the Pelvis," by Dr. W. MOORE.

SECTION OF EYE, EAR, NOSE, AND THROAT.

Dr. FERGUSON read a paper upon "Eyesight in School Children under Colonial Conditions," which was

discussed at considerable length. It was decided that a committee should be appointed to consider the main points of the discussion, and formulate resolutions to be submitted to the General Congress, with a view to approaching the educational and other authorities on the matter. Papers were also read by Dr. W. KENT HUGHES on "Bifocal Lenses;" and by Dr. F. A. POCKLEY on "A Case of Segmental Hemichromatopsia."

SECTION OF MIDWIFERY AND GYNÆCOLOGY.

Papers were read and discussed from Dr. FOREMAN, on "Conservative Gynæcology" and "The Simplification of Hysterectomy," and by Dr. J. R. PURDY upon "Midwifery Practice in New Zealand."

PUBLIC HEALTH.

A paper on "Isolation of Infectious Diseases by Local Authorities," was read by Dr. G. SPROTT, officer of health, Hobart. After it had been discussed, two resolutions were passed.

Dr. EAMES then read a report upon "Reform in Quarantine."

The paper dealt with the quarantine regulations affecting the port of Newcastle, the contention being that the various restrictions which had been placed upon shipping had impaired the reputation of the port and diverted tonnage which would otherwise have come to Newcastle. His suggestion was that they should perfect their sanitary measures, waterworks, and disposal of town refuse, and adopt compulsory vaccination; then substitute medical inspection, with the application of the Public Health Act. Dr. DOYLE (Newcastle) spoke in support of what had been done by the health authorities in Newcastle, and in disagreement with the view taken by Dr. Eames. At his suggestion, further discussion was deferred until the arrival of Dr. Ashburton Thompson, the president of the section.

The section and the congress then adjourned until Monday.

THIRD DAY'S SITTING.

The sitting of the Medical Congress was continued at the Technical College on Wednesday, 20th September.

SURGERY SECTION.

The work of the Congress was resumed in the surgery section, under the presidency of Dr. A. M'Cormick, of Sydney. His Excellency the Governor and Lady Lamington were present, and occupied seats on the platform. The members present numbered about 120.

PRESIDENTIAL ADDRESS.

Dr. JOHN THOMSON (president of the Congress) having introduced Dr. M'Cormick as a master in surgery, Dr. M'CORMICK delivered his presidential address. He said he was deeply sensible of the honour which they had conferred upon him in electing him to the position of the president of the surgical section; and he was overwhelmingly conscious of his inability to do justice to the position which on former occasions had been filled by such men as Sir Thomas Naghten Fitzgerald, and Mr. O'Hara, of Melbourne; and Drs. Sterling and Gardner, of Adelaide. This being the last meeting of the Congress due to be held before the passing away of the century, it occurred to him that it would not be out of place to review briefly some of the principal causes which had been so conspicuous a feature of the century, and more especially of that part of it, which it was now customary to call the "Victorian era." Before the commencement of the century, much had been done in the study of anatomy

by "the great masters." John Hunter, "the father of scientific surgery," had died in 1793. In the same year was published his treatise on the blood and inflammation. He established surgery on the only sure basis of observation and experience, and he made, as Maligne said, a science of what Pare and Petit had left but an art. Before Hunter's time surgery was practised empirically, so that the science of surgery has been almost entirely a growth of the present century, and its growth had not been a continuous and steady one. It had been rather by fits and starts, and the greater part of it had been evolved during the last fifty years or so. The most distinguished surgical features of the century had undoubtedly been the introduction of anæsthetics and the use of antiseptics. They were both epoch-making events. Perhaps the only discovery of equal moment was the introduction of the ligature by Pare. The introduction of anæsthetics had been one of the greatest blessings to mankind. In 1800 Sir Humphrey Davy discovered the anæsthetic properties of nitrous oxide, or laughing gas. The first discovery of anæsthetic properties of ether was made by Faraday in 1818, but it was left to Morton, in America, to work out its practical application. Chloroform was first suggested to Simpson by a Mr. Waldie, a chemist of Liverpool, who sent him some to try. The story went that he was not impressed with the dull, heavy-looking liquid, which was not at all his ideal anæsthetic, and he let it stand untested for some days. One night, at dinner, he spoke of it to his friends (Keith and Mathews Duncan) after the ladies had withdrawn, and suggested that they should all try. They did so by putting some of it in their wine glasses and inhaling it, "when we were all under the table in a minute or two," to quote Simpson's own graphic words. By-and-by the ladies wondered why they did not come to the drawing-room, and sent a message. The servant, a decent Presbyterian, and possibly not quite ignorant of one of the traditions of Old Edinburgh, where a boy was kept for unloosing the cravats of the guests as they succumbed, was scandalised to find her master and all his friends in a hopeless state of slumber under the table. (Laughter.) After that the future of chloroform was assured, and it became the only anæsthetic used in midwifery, and perhaps the most important in surgery. Dr. M'Cormick then referred to the introduction of local anæsthesia by Dr. Richardson, and dwelt generally upon the important part played by anæsthetics in the art of surgery. The next epoch-making event in surgery was the advent of antiseptics, and the speaker proceeded to deal with antiseptic and aseptic methods, the importance of an accurate knowledge of anatomy, and the advances made in surgery in connection with operations for the removal of cancer of the heart, and for the removal of the whole or part of the tongue. He described in detail an operation of the latter class as performed by himself. His description of the operation drew warm applause from the audience.

Dr. THOMSON proposed a vote of thanks to Dr. M'Cormick, and it was carried by acclamation.

RONTGEN RAYS.

A paper was then read by Dr. F. C. CLENDINNEN (Melbourne) upon "Three Years' Experience with the X Rays," which was listened to with great interest. The various experiments made by Dr. Clendinnen were illustrated by a series of remarkably fine lantern slides.

At the conclusion of this demonstration his Excellency and Lady Lamington retired.

Dr. HOPE LEWIS (New Zealand) read a paper on "So-called Brain Fever." and Drs. TURNER, MACDONALD GILL, and CLUBBE read papers on "Diphtheria."

EYE, EAR, NOSE, AND THROAT.

Some discussion took place in this section on the question of the eyesight of railway and marine employees. At the previous congress resolutions were passed for the formulation of tests of the eyesight of men employed in shipping and on railways; and they were forwarded to the authorities interested. It was stated that the precautions still taken to guard against the employment of men who were colour-blind or whose vision was otherwise defective were carried out in a very lax manner in some places, and instances were given of men who, though condemned after scientific examination, had been employed afterwards on a practical test. Dissatisfaction was expressed with the regulations in Victoria and New South Wales and elsewhere, and it was urged that it was desirable, in the interests of public safety, that matters should be placed on a better footing. The whole matter was referred to a committee, with instructions to draw up resolutions for submission to the congress.

FOURTH DAY'S SITTING.

SECTION OF PUBLIC HEALTH.

PRESIDENTIAL ADDRESS.

The sitting of the Medical Congress was resumed at the Technical College on Thursday, 21st September.

CONSUMPTION.

The presidential address in the Public Health Section was delivered by Dr. J. ASHBURTON THOMPSON, of New South Wales, in the presence of a numerous attendance of the members.

Dr. JOHN THOMSON (president of the congress) proposed a vote of thanks to Dr. Ashburton Thompson for his address, which was carried by acclamation.

SECTIONAL WORK.

Dr. THOMPSON having returned thanks, the public health section was constituted. Dr. CHAPPLE (New Zealand) read a paper on "Fertility of the Unfit," and Dr. FLAHERMAN (New South Wales) one upon "Rib Fracture in the Insane."

SURGERY.

The discussion on the paper on appendicitis was concluded. Dr. W. KENT HUGHES (Melbourne) then read a paper on "Anatomy and Treatment of Talipes Equino-varus" (congenital).

MEDICINE.

The morning was occupied in the section of medicine in discussing the bath treatment of typhoid. Dr. HARE (Brisbane) introduced the subject by reading a paper on the "Cold Bath Treatment," setting forth the results in Brisbane. He adduced figures showing that the mortality in cases of typhoid had been reduced from 15 per cent. to 7.5 per cent. by this method of treatment. A lengthy discussion ensued. There was some difference of opinion as to the nature of the baths which should be used. Dr. HARE advocated the cold bath, and Dr. HIRSCHFELD spoke in favour of the tepid bath, as now used at the Brisbane Hospital, his argument being that quite as good results were obtained by it and less discomfort occasioned to the patient. He also paid a high tribute to the excellent work done by Dr. Hare, who, he said, must be looked upon as one of

the first authorities upon typhoid. Other speakers questioned the suitability of either system to severer climates than that of Brisbane. Dr. SOOT SKIRVING (the president of the Section) said since he had seen the system in operation in Brisbane he had become less prejudiced against it. He could not say that he was prepared to adopt it, but he thought it might possibly be considered in extreme cases where there was great intensity of temperature. He thought that it might be useful in practice, but for himself he still clung to the system adopted in Sydney—the less robust treatment of sponging, which was far less troublesome to the patients, and he considered it equally efficient in the majority of cases.

MIDWIFERY AND GYNÆCOLOGY.

Professor WATSON exhibited a remarkable specimen of a hermaphrodite child which was born in Melbourne and died at five years of age. He then read a paper on "Saving Blood in Gynæcological Operations." Dr. E. A. FALKNER afterwards read a paper on "Puerperal Eclampsia and its treatment."

The congress at 1 o'clock adjourned until 10 o'clock next day.

FIFTH DAY'S SITTING.

The Session of the Medical Congress was resumed at the Technical College on Friday, 22nd September.

MIDWIFERY AND GYNÆCOLOGY.

The Presidential Address in this section was delivered by Dr. M. U. O'Sullivan, of Melbourne, and at the close of his remarks a hearty vote of thanks was accorded to him.

PUBLIC HEALTH.

The work in the Public Health Section was resumed under the presidency of Dr. Ashburton Thompson. Dr. Turner announced that an exhibition of cases of children suffering from lead poisoning would be made in the Medicine Section at ten o'clock on the following morning. It was then decided that the consideration of the Venice Convention should be undertaken by a sub-committee consisting of the Government representatives. Dr. TURNER (Brisbane) read a paper on "Diphtheria Mortality and Effect of Antitoxin on Death Rate." In the discussion which followed the opinion was expressed that the greatly reduced mortality since the introduction of anti-toxin had been entirely due to its use. It was also stated that climatic conditions had something to do with the excellent results obtained in Brisbane. Dr. TURNER, in replying, said antitoxin was as fitted for private practice as for hospitals, and it ought to be used in private practice. If it were so used generally he believed it would be unnecessary to send mild cases to the hospital, and many cases which were sent to the hospitals in a bad condition would have got well in two or three days at home. He held that the efficacy of antitoxin was a proved thing, and it should be used by everybody. It was not a question of a scientific problem, but a matter of saving life. The object of his paper was to point out that, owing to the conservatism of the medical profession in Great Britain in matters of treatment, lives were being sacrificed by the thousand which otherwise might be saved.

Dr. HALFORD (Brisbane) read a paper on "The Use and Abuse of Hospitals in Queensland." The chief abuses, he pointed out, were the system by which those who could pay for ordinary medical treatment availed themselves of the hospitals, and by that which Government endowment was obtained for institutions which were conducted practically on benefit society lines.

Some hospitals, he pointed out, obtained subscriptions by guaranteeing the advantages of free treatment to the subscribers, and upon those subscriptions received Government endowment. That, he complained, was a misuse of hospitals, which primarily existed for the indigent poor, and were really charities. He thought hospital reform should lie in the direction of denying treatment to people who were well able to pay for it at the hands of ordinary medical practitioners. To that end he maintained the hospitals ought to be conducted under uniform rules, and controlled entirely by the State.

Dr. RICHARDS (Mount Morgan) expressed his opinion that it was a shame that the taxpayers should be called upon to provide free board and lodging and medical treatment to people who could well afford to pay for it themselves.

Dr. SAMUELSON (N.S.W.) believed many comforts were denied to patients because money that should be applied to that purpose was devoted to what might be called "trills." He would like to see an inquiry into the management of the country hospitals, with a view to controlling the internal expenditure, and to removing the anomaly by which hospitals in least need of subsidy received more Government assistance than those which required it the most. There should be also some inquiries into the system of admitting paying patients, who were sometimes attended to to the neglect of the indigent sick. He thought there ought to be a distinct fund established, and inspection instituted for the benefit of the indigent sick who became the children of the State.

Dr. CARBUTHERS (N.S.W.) explained that there was now a Royal Commission inquiring into the hospitals in New South Wales. He thought some abuse of the hospital might be removed by making the patients who sought treatment subscribe to a declaration that they were unable to pay.

Dr. COMYN complained of a tendency now to send all surgical cases to the General Hospital. He referred to the case of the treatment of the Hon. E. B. Forrest at the Brisbane General Hospital. He took it that Mr. Forrest scarcely understood when he was treated there that he was participating in a charity.

Dr. JOHN THOMSON deprecated the introduction of the personal element. He felt that if the whole of the circumstances were taken into consideration it would be seen that there was great excuse for the taking of Mr. Forrest to the General Hospital. The accident happened late at night and far out of town, and when Mr. Forrest was brought to town he was suffering great agony, and did not know where he was being taken. Certainly any question as to his treatment at the institution had been removed by his gratitude and munificence. (Applause.)

Dr. PINNOCK (Victoria) thought the paying patient evil might be modified by the use of a declaration so framed that if it were falsely made out the patient could be prosecuted for perjury.

Dr. PAIS (Sydney) attributed a good deal of the abuse of the hospitals by persons able to pay for private treatment to the action of practitioners in sending cases to the hospitals.

Dr. HALFORD, in reply, urged that the Government should be asked to inquire into the whole hospital system.

The discussion was then adjourned until the following morning.

EYE, EAR, NOSE, AND THROAT.

Papers were read by Dr. KIRKLAND on "Quinine Amaurosis"; by Dr. KENT HUGHES on "Congenital Sarcoma of Eyelid"; by Dr. TAYLOR on "Operation on

Larynx"; by Dr. FERGUSON on "Operation for Conical Cornea," and by Dr. LOCKHART GIBSON on "Aural Vertigo."

SURGERY.

In this section Dr. HAMILTON RUSSELL read a paper on "The Aetiology and Treatment of Inguinal Hernia in the Young"; and by Dr. PAIS, for Dr. H. V. Critchley Hinder, on "Operative Treatment of Inguinal Hernia." At the close of the discussion Dr. M'Cormick, who presided, referred in terms of praise to the work done by the secretary, and to the kindness and hospitality with which the members of congress had been received. A vote of thanks was accorded to the secretary.

MEDICINE.

Dr. Scot-Skirving, the president of the section, having left, Dr. Power, of Sydney, occupied the chair. Dr. JARVIS HOOD read a paper on "Acute Yellow Atrophy," and Dr. DAVENPORT one on "The Determination of Sex." Dr. TAYLOR showed a patient suffering from a nervous disease. Dr. HIRSCHFELD read a paper on "The Influence of Haemorrhage on the Course of Pulmonary Phthisis."

At 1 o'clock the congress adjourned until 10 o'clock on the following day.

SIXTH DAY'S SITTING.

The Intercolonial Medical Congress was brought to a close on Saturday, 23rd September. The final meetings of the sections were held at 10 o'clock, and then there was a full assembly of the members still in town. The attendance was not so great as at the earlier meetings, but the lecture-room in which the meeting was held was well filled. The chair was occupied by the President (Dr. John Thomson), who, in taking his place, received quite an ovation. The General Secretary (Dr. Wilton Love) was greeted in a similar manner. The first business consisted of receiving the reports of the various sections.

PUBLIC HEALTH.

Dr. ASHBURTON THOMPSON (president of this section) submitted the following resolutions, as having been adopted by that section:—

"That the Fifth Intercolonial Medical Congress, having considered a letter from the Women's Christian Temperance Union of Australia in reference to the Contagious Diseases Acts, is quite unable to agree to the repeal of the measures which science and experience have devised and the Legislatures have adopted for lessening the ravages of a disease which is transmitted by its victims to innocent mothers and children, causing in them many serious and fatal affections. The Intercolonial Medical Congress begs to remind the Women's Christian Temperance Union of Australia that these measures are enforced not in the interests of the vicious and depraved, but for the protection of mothers and children. The Intercolonial Medical Congress, while unable to agree with the Women's Christian Temperance Union as to the medical methods of preventing these diseases, beg to assure the Women's Christian Temperance Union that the medical profession throughout Australia will hail with pleasure every auxiliary effort made by the Women's Christian Temperance Union of Australia for the diffusion of a correct moral tone among the community."

"That this section recommend congress to appoint a board consisting of the principal medical officers, and another, a member of the Army Medical Corps, of each colony, with power to add to their number; such

board to act in an advisory capacity with regard to the peace and war requirements of the Army Medical Corps. This board to report on this matter to each succeeding Congress.

"That isolation hospitals should be opened as separate establishments apart from and not adjacent to general hospitals, because of the extreme danger of infectious disease being communicated to other patients in the ward.

"That this section requests congress to forward a memorial to the Governments of the respective colonies, setting forth the abundant evidence available of abuses of the charitable institutions, and that, in the interests of the State, radical changes in the constitution, the management, and the maintenance of such is urgently indicated."

"That in the opinion of this section the compulsory notification and isolation of infectious diseases by proper hospital accommodation are of much importance to the health of the community, as well as to the best interests of trade and commerce; that this congress respectfully submits to the attention of the colonial Governments the desirability of enforcing notification, and of providing proper accommodation in the various centres of population."

The resolutions were agreed to unanimously, with the exception of that in favour of the establishment of separate isolation hospitals. To that Dr. Ashburton Thompson said he could not give his support, because he did not consider it practicable under the present circumstances of the colonies. It seemed to him that to insist upon having infectious hospitals entirely separate from general hospitals would be to prevent the establishment of infectious hospitals for many years until the population increased.

The report of the sub-committee of the section of Public Health upon "Whether the Congress should advise the Hon. the Premier that the Executive Government of Queensland should signify its adherence to the Venice Convention of 1897, or to any part thereof," was then submitted. The sub-committee consisted of Dr. Ashburton Thompson, representing the Government of New South Wales; Dr. T. Cahill, the Government of New Zealand; Dr. Wilton Love, the Government of Queensland; Dr. L. W. Bickle, the Government of South Australia; Dr. G. Sprott, the Government of Tasmania; and Dr. W. L. Watkins, the Government of Victoria. The unanimous report was as follows:—"(a) That as the convention orders that persons who arrive on suspected ships shall be dismissed to their destinations, there to be kept under surveillance for a term of ten days, it would be inexpedient for the Government of Queensland to adhere to the convention in its entirety, that method not being sufficiently stringent in the actual conditions met with in Queensland. (b) That the Government of Queensland might and should signify its adherence to the first part of Chapter I. and to Chapter II., Titres I. and II. of the convention, which relate to notification of any outbreak of plague within its territories, and of the subsequent progress of the disease, to the foreign Governments which are parties to the convention, and to neighbouring countries.

The report was adopted.

EYE, EAR, NOSE, AND THROAT.

DR. LINDO FERGUSON, president of the section, reported the following recommendations from the section:—"1. That in the opinion of this section it is highly desirable, both in the interests of the children themselves and of the future of the race, that the incidence of educational work should be much lightened

for girls between the ages of 12 and 15 years by the reduction of the school hours and home lessons, and that their physical development should be aided by appropriate outdoor physical exercises as part of their school course.

"2. That it is desirable that school teachers in training schools receive such instructions as may lead to their recognition of symptoms of their pupils indicating defective vision, hearing, or other physical condition calling for medical attention.

"3. That the attention of the colonial Governments be called again to the resolutions passed by Inter-colonial Medical Congress held in Dunedin in 1896, on the subject of the standard of vision in sailors and railway men, and that the urgency of their adoption should be again emphasised, with the recommendation that a uniform standard for all the colonies be fixed, not lower than the highest standard at present demanded in any of the colonies for both form and colour."

The recommendations were adopted unanimously.

QUARANTINE.

DR. EAMES moved—"That in view of the early federation of the colonies, and the enormous commercial interests at stake, this congress recommends to the colonial Governments the advisableness of holding a conference at an early date, at which commercial representatives from every colony should be present, to point out to the various medical experts the dislocation in trade and disabilities to shipping caused by the imposition of quarantine; and that the Premier of Queensland be requested to communicate with the other Premiers, and arrange the time and place of such conference."

DR. PURDY seconded the motion.

Some objection was taken to the motion being received, as it had not come as a recommendation from any section, and could not be debated. Ultimately, the president decided to put the motion, and the sense of the congress being taken, the motion was negatived by 33 votes to 24.

NEXT PLACE OF MEETING.

DR. BRIGHT, on behalf of the medical profession of Tasmania, gave an invitation to the congress to hold its next session at Hobart in March, 1902.

It was decided to accept the invitation, and Dr. Bright, amid some enthusiasm, was elected the next president.

VOTES OF THANKS.

Professor WATSON moved that the thanks of the Congress should be communicated to his Excellency the Governor, the Hon. the Premier, the Minister for Railways, the Bishop of Brisbane, Bishop Stretch, the Rev. Mr. and Mrs. Nisbet, the President of the Medical Society of Queensland, the President and members of the Brisbane Branch of the British Medical Association, the Queensland Club, the Johnsonian Club, the Golf Club, the Tennis Club, the Art Society, and Mrs. Pinnock and the Press.

DR. JARVIE HOOD seconded the motion, which was then carried amid demonstrative applause.

DR. HARDIE moved, and DR. DAVENPORT seconded, a vote of thanks to the sectional officers. DR. WORRELL moved, and DR. SPOTT seconded, a vote of thanks to the members of the Executive Council. DR. SYME moved, and DR. BRADY seconded, a vote of thanks to the general secretary (Dr. Love). The motions were carried with enthusiasm, and especially the latter.

DR. TAYLOR responded briefly on behalf of the Executive Council, and DR. LOVE on his own behalf.

On the motion of DR. LINDO FERGUSON, an enthusiastic vote of thanks was accorded to the president, to

Mrs. Thomson, and Miss Thomson, the members rising in their places, and cheering, and concluded by singing with great heartiness "For he is a jolly good fellow."

Dr. THOMSON having briefly responded, he formally declared the congress closed.

THE CONTAGIOUS DISEASES ACT.

When the motion in reply to the memorial from the Women's Christian Temperance Union was before the Public Health Committee a short discussion took place.

Dr. CARRUTHERS said that if they were dissatisfied with those acts it was because of the way in which they were administered. Experience had shown that such Acts were necessary, and especially in large seaport towns.

Dr. CHAPPLE said that at first medical men were prejudiced in favour of these Acts, but experience had shown that they had not proved a success in those parts of the world in which they had been adopted. In India he had been assured by a surgeon of large experience there that there was such collusion between the women and the police that the object of the Act was practically defeated. Whatever might be the view with regard to the Act there was great dissatisfaction with the administration.

The motion was then carried.

PROCEEDINGS OF BRANCHES.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE regular monthly meeting of the Branch was held at the Royal Society's Rooms, on Friday, September 29th, 1899, at 8.15 o'clock, Dr. E. T. Thring (President), in the chair. There were also present: Drs. Charles MacLaurin, W. H. O'Neill, Taylor Young, Crago, Cosh, Harvey, Mellroy, Palmer, Barrington, Fairfax Ross, Tidswell, West, Martin, R. H. Jones, Gledden, Fiaschi, G. Armstrong, Clubbe, Clark, W. G. Armstrong, Maitland, Mills, Craig, Chenhall, Flynn, Abbott, Walker-Smith, O'Hara, Hinder, J. A. Dick, A. Neale, Binney, Hall, Neill, Browne, Kirkland, A'Beckett McCarthy. Visitors: Dr. Wassall, Dr. Chapple and Dr. Nihill.

The minutes of the general and special meetings were read and confirmed.

The PRESIDENT announced the election of the following gentlemen as members of the Branch:—Dr. Halliday, Rockdale; Dr. A. Neale, Sydney; Dr. Lawes, Cobar; and the nomination of Dr. Wade, Stanmore; Dr. F. A. Bennett, Morpeth; Dr. H. E. Ellis, Sydney; Dr. Turkington, Merriwa.

Dr. BARRINGTON read a paper on "A Year's Hospital Abdominal Surgery." (See page 432.)

Dr. CHARLES MACLAURIN said that he noted Dr. Barrington used nothing but kangaroo tendon for the buried sutures. He himself did not care for this material, which he had lately almost abandoned in favour of formalin catgut. The latter he had found more uniform in size, and more easily tied, than kangaroo tendon, and he had repeatedly taken cultures from it, invariably finding the catgut sterile. His last 19 clean operations for hernia, varicocele, and movable kidney, had all been done with formalin catgut, and all healed by first intention, while of four hernias done with tendon two had suppurated. With regard to the statistics showing higher mortality in

those cases where drainage-tubes had been used, the real interpretation of them was that tubes had been used in the more serious cases, which would be likely to show a higher mortality.

Dr. HINDER said the success which attended Dr. Barrington's cases was a fair criterion that the methods adopted by him were good. It was not easy to discuss every point raised, for there was no doubt but that the different lines of treatment adopted by various men met with equally good results. He (Dr. Hinder) certainly preferred to wash out the peritoneal cavity only in those cases where there was a general diffuse peritonitis. It always seemed to him that there was in cases of localised suppuration a far greater risk of diffusing septic material throughout the general peritoneal cavity. Dr. Barrington opened up the question of shock. He (Dr. Hinder) did not wish to imply that the death quoted by Dr. Barrington was not due to shock, but there was no doubt a great tendency to attribute many deaths to shock which were in reality due to hæmorrhage in the majority of instances, and in some others to sepsis. His own impression was that death from shock was an extremely rare occurrence.

Dr. TAYLOR YOUNG said he must congratulate Dr. Barrington upon the systematic way in which he had presented his cases. It was, of course, impossible to criticise every case, but there were a few points which he would like to discuss. He was quite at one with Dr. Barrington as to the fewer hands employed at an operation the better—one assistant and one nurse were quite sufficient for all purposes. He thought the nurse should wear sterilized gloves, and the assistant might also use them. With reference to the question of ligatures, he thought, as a rule, that catgut sutures were the best. Silk had a happy knack of migrating, and often caused serious after results. As to the matter of irrigation or sponging, he (Dr. Young) preferred swabs, which could be discarded at once. Of course it depended largely upon the case as to whether drainage should be resorted to or not.

Dr. FIASCHI said he must congratulate Dr. Barrington on his paper, although there were some points on which he differed from him. He (Dr. Fiaschi) did not believe in doing away with drainage in all cases; there was one class of case in particular in which he thought it was desirable to use methods of drainage, namely, in cases of appendicitis. He was sorry he had not been able to go to the Medical Congress at Brisbane, as he understood that this subject had been under consideration, and he would have liked to have said something on the matter. He was convinced that in almost all cases of appendicitis it was absolutely necessary to use drainage. With regard to the question of using morphia in the after treatment of these cases, he was satisfied that every case must be dealt with on its merits, and the exhibition of morphia was necessary in some cases.

Dr. FAIRFAX ROSS said he quite agreed with Dr. Barrington as to the use of drainage tubes. He certainly had a very strong objection to their use; it appeared to him that their use only left an opening for the introduction of infection into the peritoneal cavity. He (Dr. Ross) did not think it mattered much what sutures were used so long as they were aseptic. He did not know whether formalin catgut had a longer life than ordinary catgut.

Dr. THRING thanked Dr. Barrington for his interesting paper, and congratulated him upon his results. Abdominal surgery is going through a process of rapid evolution as to methods and technique. Procedures which were regarded as satisfactory quite a short time ago are now looked upon as obsolete.

Without any desire to criticise unkindly, he could not but feel that Dr. Barrington was inclined to be somewhat dogmatic on certain points at all events, such as drainage, irrigation, etc. Each case must be treated upon its merits. Dr. Barrington had spoken of a certain class of cases as "salpingo-oophorectomies." Did Dr. Barrington invariably remove the ovaries in those cases of tubal disease in which it was necessary to remove one or both Fallopian tubes? Personally he (Dr. Thring) often found it to be possible to leave behind one or both ovaries, even when one or both tubes contained pus, and were so hopelessly damaged that they required removal. With regard to sponges, he (Dr. Thring) quite agreed that the fewer hands touching them the better. For a long time he had made a practice of having the sponges wrung out of sterilized normal saline solution, thereby avoiding the damage to the covering cells of the peritoneum, which must ensue if pure water is used. With regard to the best material for sutures and ligatures, it was quite possible to do any abdominal section from start to finish with No. I. and No. III. catgut, or fine wallaby tendon. Silk need never be used, unless the operator preferred it, and that silk knots and ligatures do occasionally wander about in an extraordinary unpleasant manner is beyond question a fact. Fortunately the days of the old-fashioned pedicle, which included not only the vessels wanted, but a great deal of tissue not necessary to be included, were numbered, and he (the speaker) hoped that soon it would be the universal practice to secure the vessels only. *As to irrigation*, it is certainly not often required in abdominal work, though occasions do arise in which it may be most useful. Still there is always the possibility of carrying infective material into the various pockets of the peritoneum, which previously were clean. Often when at the end of a severe abdominal operation the patient is collapsed the filling of the pelvis with normal salt solution before closing the abdomen is followed by the best results. It takes the place of a sub-mammary injection of fluid. *Drainage, or no drainage*, was a most important and sometimes difficult question to decide. Personally, he (Dr. Thring) drained less and less often, and it was a long time since he had used a drainage tube. Clean cases hardly ever required drainage. On the other hand, there was sometimes as the result of the separation of extensive and old-standing adhesions, such a large "weeping" surface left, that careful gauze packing was the only way to arrest what would be otherwise serious bleeding. With regard to sutures, he would like to refer to one point in particular, viz., the leaving of them for a period of three weeks. Long before that time had elapsed they had ceased to be of use for their original purpose of approximating separated surfaces, and were simply in the position of foreign bodies in the tissues. The less morphia given in the after treatment of abdominal cases the better, but here again he (Dr. Thring) could not agree with Dr. Barrington in his absolute condemnation of it. In some cases it was absolutely necessary. Finally, he certainly agreed that *asepsis* was to be tried for; but unfortunately there was all the difference between the *ideal* and the *possible*.

Mr. BARRINGTON, in reply, thanked the members for their kindly criticisms on his paper. While agreeing that formalin catgut was the best form of catgut, in that it could be boiled, he could not concede that it was when buried superior to wallaby tendon, which in its pristine state was sterile. The latter taken direct from rectified spirit tied as crisply as the best catgut,

the individual tendons were most uniform in size, and if sulphochromized it would resist absorption, which was a distinct advantage in the radical cure of large ventral hernie where this property maintained for two or three months as far as the muscular and aponeurotic appositional sutures were concerned was most desirable. Suppuration as a sequel to the use of buried tendons probably arose from faulty preparation, and therefore it was safer for the surgeon to prepare his own ligatures, which was his universal practice. During the past nine months white and green tendon had been used to the entire exclusion of catgut, and so far, though too early to speak, abandoned tendons had given rise to no trouble whatever, and he could only say the more he used them the better he liked them. In referring to the larger mortality of drained as compared with undrained coeliotomies he was speaking of the comparison of a large number of sections in which drainage was utilised from time to time, and then practically abandoned, as in Kelly's published statistics. The objection raised to irrigation for cleansing the pelvis, on the ground that it tended to disseminate any noxious material, he regarded rather as an advantage, as the dilution and spreading of possibly septic matter enabled it to be rapidly eliminated by the healthy peritoneum with which it came in contact, for the experiments of Muscatello had proved its great power of absorbing even large quantities of virulent micro-organisms. Happily most of the pus in chronic pelvic lesions is sterile, and even if it were not it is extremely improbable that any sponging, short of that which would actually remove the serous membrane, could efficiently remove all its micro-organisms. The suggestion that the surgeon should alone handle the sponges was the ideal, and while this was aimed at, in a tedious operation the manipulation of instruments, ligatures, and sponges, was a bigger order than one man could actually carry out in practice, and his procedure in this respect was largely influenced by the degree of development of the aseptic conscience of the assistant and nurse. He fully agreed that sterilised thread gloves for the nurse's hands was a valuable addition to technique, and arrangements had actually been made for such in the next coeliotomy, and while admitting absorbable ligatures were preferable to silk for pedicle ligation he should give the preference to wallaby tendon rather than catgut. Exception had been taken to the retention of the lowest through and through suture for a month—young scar tissue stretched, and he thought it better to give it support in its early life at the weakest point of the cicatrix through which hernia was later prone to occur. The statement that no morphia had been given in the after treatment had elicited surprise, but the pre-anaesthetic hypodermic had largely helped to make this unnecessary, and while many of the patients complained of pain they were with suitable argument encouraged to bear it, as he regarded morphia as no friend to the abdominal surgeon, having probably sealed the death warrant of many. His remarks on drainage were applicable to gynaecological coeliotomies, and he was entirely in accord with the advisability of drainage in suppurative appendicitis. He had endeavoured as far as possible to imbue his work in the pelvis with the spirit of conservatism, believing in the principle of removing diseased and leaving healthy structures, especially in regard to the ovary. He was pleased to hear Dr. Thring's approval of wallaby tendons as a pelvic ligature, and should in future endeavour to rely upon it in place of silk. In dealing with a large pelvic collection of pus he would certainly have the pelvis lowered after endeavouring

to ascertain its relations in Trendelenburg's position. He tried to crystallise his short experience in the paper, and had no doubt many modifications would be made with the lapse of time. Dr. HINDER read notes on "Aseptic Surgery." (See page 442).

Dr. BARRINGTON appreciated the great practical value of Dr. Hinder's paper, and thought one of the key-notes of aseptis had been struck in advocating avoidance of septic contact. He thought that surgeons should make every endeavour to avoid touching septic material, and with this end in view he wore sterilised film rubber gloves while doing any septic operation, and if it were necessary to carry out a septic procedure as a preliminary to an aseptic operation, *e.g.*, preliminary curetting of uterus to an Alexander's Operation or abdominal section. This kept the hands clean, and they did not impair the sense of touch. He would suggest as time-saving the method of drawing out wallaby tendons by breaking through the intervertebral cartilage, and then making steady traction, while holding the tail stump, by grasping the vertebra with sterilised pincers. In this way, by breaking through each succeeding cartilage, the tendons connected with each vertebra could all be drawn out at once. His experience of frequently boiling China twist silk was that it rendered it brittle and prone to break in tying. He fully approved of plain, sterile gauze dressing as favouring primary union and an afebrile convalescence, but to ensure this the technique must be careful.

Dr. NEILL said the great difficulty to contend with was to sterilise the hands. With regard to the matter of ligatures, they should not be fastened too tightly else they would act as irritants, and in some cases would cause suppuration. In sterilising catheters he found the only ones which would stand boiling were the rubber, all the others became very tough.

Dr. HINDER, in reply, said that there was no doubt that in the boiling of catheters you would very likely come across a catheter which would be spoilt in the boiling, however he (Dr. Hinder) found that the better the catheter the better it would stand the treatment. Those catheters shown now had been boiled, and it was obvious that they had not suffered to any appreciable extent. He thought that those cases which Barker was said to have mentioned as having suppurated because the ligatures were drawn too tightly were in all probability septic. He had to thank the members for the very patient hearing accorded to him.

(Bourke), F. W. Elsner, (Moree), H. Tresidder, (Dubbo), S. Finlay, (Dungog), A. E. Woodforde, (Uralla), R. L. Faithfull, G. P. Stanley, (Tamworth), John MacPherson, (Glen Innes). An apology was received from Dr. F. H. Quaife.

Dr. W. H. CRAGO, in the absence of Dr. Foreman, moved, "That after the word 'homœopath' in last line of Rule 3 the following words be inserted:—'or who employs an unqualified assistant.' This alteration to come into force at once." He said that the General Medical Council in England had declared the employment of unqualified assistants to be unprofessional, and the Medical Union should not elect to membership any person who employed any unqualified assistant.

Dr. COLLINS seconded the motion, which was carried unanimously.

Dr. CRAGO (for Dr. Foreman) moved:—"That the following words be added to Rule 8: 'Any member who shall continue to employ an unqualified assistant in the conduct of his practice shall cease to be a member.' This alteration to come into force on March 1st, 1900."

Seconded by Dr. MUSKETT, and carried *nem con.*

Dr. G. LANE MULLINS moved:—"That after the word 'beforehand' in Rule 16, the following words be inserted:—'Except in cases of extreme urgency.'"

Dr. MULLINS said that it was sometimes necessary to call the Council together at very short notice, as when a member was called upon to answer a serious charge. Under the rules as they stood this could not be done legitimately, and might be the cause of irregularity. He instanced a case which occurred some time ago when a member was arrested on a serious charge. The members of the Council were each telephoned to, and out of sixteen members fifteen attended a meeting that evening—the sixteenth was out of town, and could not be communicated with.

Dr. JAMIESON seconded the motion, which was carried unanimously.

Dr. MULLINS then moved:—"That the following words be added to rule 18: 'Absence from "urgent" meetings, of which three days' notice has not been given, shall not come under this rule.'"

This was seconded by Dr. MUSKETT, and carried.

The hon. treasurer (Dr. Crago) announced that the funds in hand now amounted to £1,350.

The meeting then terminated.

SYDNEY AND SUBURBAN PROVIDENT MEDICAL ASSOCIATION.

A meeting of the Medical Profession will be held at 121 Bathurst Street, Sydney, on 7th November, 1899, at 8.30. p.m.

BUSINESS.

1. To receive the Annual Report.
2. The question of altering the rule in regard to the number on the Committee.
3. Election of Office-bearers for the ensuing year.
4. Any other business.

As all Medical Practitioners in Sydney and Suburbs who are eligible for membership of New South Wales Branch of the British Medical Association, may become members of the Active or Consulting Staff, the Hon. Secretary will be glad to receive the names of any gentlemen who wish to be placed on either Staff.

A. A. O'HARA,
Hon. Secretary.

PROCEEDINGS OF OTHER SOCIETIES.

NEW SOUTH WALES MEDICAL UNION.

A SPECIAL general meeting of the members of the New South Wales Medical Union was held at 121 Bathurst Street, Sydney, on September 26th. In the absence of Dr. Quaife, Dr. Fiaschi took the chair. There were also present Drs. Muskett, Jamieson, Coutie, A. B. McCarthy, P. J. Collins, T. M. Martin, West, Binney, G. H. Abbott, L. E. F. Neill, Crago, Mullins. The following members were represented by proxy, *viz.*:—Drs. M. Matheson, (Waverley), Knaggs, Beaton, (Newcastle), W. T. Chenhall, L. Vallee, (Inverell), G. W. Watt, (Narrandera), T. Lane, (Inverell), T. Carson Fisher, (Bowral), Nickson, (Newcastle), Watson-Munro, P. M. Wood, (Ashfield), E. S. Littlejohn, J. McLeod, (Hurstville), H. Kirwan King, (Nowra), J. P. Hocken, (West Wallsend), C. H. Scott,

THE SYDNEY AND SUBURBAN PROVIDENT MEDICAL ASSOCIATION.

THE usual quarterly meeting (July-September) of the Sydney and Suburban Provident Medical Association was held at 121 Bathurst-street, on Tuesday, 10th October. Present: Dr. Worrall (in the chair), Drs. Litchfield, Chas. MacLaurin, J. Adam Dick, West, Hall, Carruthers, Cooley, Parker, Neill, Macdonald Gill, O'Gorman-Hughes, Perkins, Wade, Sinclair Gillies, A. A. O'Hara, and E. H. Binney.

The minutes of the preceding quarterly meeting were read and confirmed.

The question as to the desirability of adding to the members of the sub-committee and abolishing the general committee was raised. After discussion it was resolved to defer the matter till the annual meeting.

The HON. TREASURER made his financial statement, which showed the Society to be in a sound financial position, and it was announced that the usual rate per member would be paid to the active staff.

YEARLY FINANCIAL STATEMENT.

Year ending October 10th, 1899.

		£	s.	d.
Total balance, 1st quarter	...	353	19	9
" " 2nd "	...	438	3	6
" " 3rd "	...	484	16	11
" " 4th "	...	515	9	3
		£1,792	9	5

Dr. CHAS. MACLAURIN moved, and Dr. J. A. DICK seconded, the motion that the report be adopted. Carried.

LETTERS TO THE EDITOR.

A SAD CASE.

(To the Editor of the Australasian Medical Gazette.)

SIR,—I am greatly obliged to you for kindly inserting, in your last issue, an appeal from myself on behalf of a medical man at "Rest Haven." I regret, however, that the response has not been very liberal. Had each medical man in the colony subscribed three pence (3d.) it would have amply sufficed for all purposes.

To Dr. G. E. Rundle, and to Dr. W. H. Crago, the only gentlemen who have, so far, responded to my appeal, I am deeply grateful for their donations of £1 and £1 10s. respectively, and I am happy to inform them (and yourself, sir), that the case is one giving me much satisfaction, and which will, I hope, do their charity credit.

Yours obediently,
COURTENAY SMITH,
Director of "Rest Haven."

Trafalgar House,
9 Princes Street, Sydney,
October 9th, 1899.

THE LAUNCESTON HOSPITAL DIFFICULTY.

(To the Editor of the Australasian Medical Gazette.)

SIR,—In the August number of the *Gazette* an attempt is made by Dr. Johnson, of Eyandale, to prove some of the statements made in my previous letter to be incorrect. I cannot say that success has attended his efforts, for any side-light that he has tried to throw

on the facts presented has left them undisturbed. Whether the Launceston Hospital is a "large clinical hospital" or not is a matter of definition. In comparison with the large hospitals in the great cities of the colonies, it is not. This was the sense in which I used the term.

On the Board of Management of thirteen members there are three medical men (one present and one past member of the Honorary Staff, and one past Surgeon-Superintendent).

It cannot be denied that the agitation for reform has been productive of some good, so that the Honorary Staff, as stated in my last letter, decided at the conference held recently to recommend the continuance of the present system. In fact, the two members of the Staff who had signed the petition of eighteen months ago declared that if any further duties were put upon them they would be compelled to resign their positions. I shall leave your readers to decide whether the term "trumpy concessions" is justified.

My contention as to the small but active minority (in favour of the reform) is based on different premises to that of Dr. Johnson. His statements are based on the signing of a petition for reform more than eighteen months ago when sixteen practitioners of town and country put their signatures to the paper.

On referring to the Medical Register for Tasmania we find that there are fifteen practitioners in Launceston, and thirty-three in the country districts around, exclusive of eight or nine on the West Coast, which supplies a number of patients to the Launceston Hospital. Since the signing of the petition, and since an alteration was made in the working of the present system twelve months ago, the conference with the Honorary Staff has been held with the result above stated.

From the minutes of the meetings of the Launceston Sub-Branch of the British Medical Association (no regular report with names of those attending being published in the *Gazette*) we shall find that during the past twelve months ten meetings have been held, at seven of which the Hospital question and matters connected therewith have been dealt with. Leaving out of consideration the medical men from the country (whose average attendance is one) we shall find that eight practitioners of the city have attended at various times, the attendances ranging from three to seven. Of these eight only five express themselves in favor of the reform, one of whom has stated his inability to undertake more responsible duties at the hospital.

As a member of the Launceston Sub-Branch of the British Medical Association from which alone any action in this matter is emanating, I cannot do other wise than ascribe it to a "small but active minority" of the Launceston practitioners.—I am, Sir, yours etc.,
J. RAMSAY,

Surgeon Superintendent Launceston Hospital.
September 9th, 1899.

A CORRECTION BY DR. POCKLEY.

Page 402, line 82, in a discussion on Ophthalmia Neonatorum, in last month's *Australasian Medical Gazette*, Dr. Pockley is reported to have said, "That in children the cornea was softer than in adults, and therefore more susceptible to the disease." Dr. Pockley writes that what he did say was, "That in infants the conjunctive and sub-conjunctival tissues were looser and more yielding, consequently the cornea was less liable to be implicated than is the case in adults."

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

The Australasian Medical Gazette and the British Medical Journal are supplied to all Financial Members of the New South Wales, South Australian, and Victorian Branches Free of Cost.

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SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

EDITOR'S LIBRARY.

THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
B. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; J. B. GUNSON,
ADELAIDE, S.A.; AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH OCTOBER, 1899.

EDITORIALS.

HOSPITALS OF NEW SOUTH WALES.

WE have before us the Fourth Report of the Royal Commission on Public Charities together with minutes of evidence and appendices. This report has special reference to the hospitals in New South Wales. It appears that there are 108 hospitals in the colony which are subsidised by the State, in addition to which, one hospital is maintained entirely by the State, and five are not subsidised. There are further-

more, five institutions for lying-in cases, three of which receive Government aid. These provide, for all purposes, 3,422 beds, being a ratio of 2½ beds for every thousand of the population. Added to these there are 1,383 hospital beds in the Government Asylums for the Infirm and Destitute, making in all, when the hospitals are fully equipped, accommodation for 4,805 patients, which brings up the total number of beds to about 3½ per thousand of the population. The total expenditure in 1898, was £145,424. The receipts (less the bequests which were invested by the Sydney and Prince Alfred Hospitals, and consequently were not available for expenditure) amounted to £142,686 towards which the Government contributed £83,355. Of the latter sum, £20,910 was for the maintenance of the hospital at Little Bay. The cost of the treatment of the sick poor in the Government Asylums for the Infirm and Destitute, is not taken into account in these figures. The report then enters into minute particulars with reference to the metropolitan and country hospitals for the years 1897-98, giving the amounts of Government aid, percentage of revenue, subscriptions and donations with the total amount of expenses in each case, and also, much valuable information regarding the number of in-patients and out-patients treated during these years. Some remarkable figures are given with reference to the average annual cost per bed, which varies from the sum of £35 11s. per bed, per annum, in hospitals which are purely benevolent asylums, to £400 per bed, per annum, and the Commission criticises in some instances the data whereon these particulars are based, and points out that considerable confusion exists in the minds of hospital authorities as to how the cost per bed should be calculated. It is shown, that in the case of the smaller hospitals, it necessarily occurs that a small increase or decrease in the average daily number of beds occupied, affects very largely the average annual maintenance cost per bed. The ambition in some quarters to establish a hospital in each small centre of population, is adversely commented upon, especially as, from a paucity of subscriptions in sparsely populated districts, the burden of the largest subscription is thrown upon that pliable milch cow—the Government, which furnishes, in addition, funds for half, and sometimes more than half of the cost of the erection of such buildings, and, as a necessary sequence, the subsequent maintenance of these institutions. Furthermore, with all this outlay, it appears to have no voice whatever in the management of money so expended.

The whole hospital system is so open to abuse from the untrammelled action of committees of management, that the Commission emphatically recommends the appointment of an officer by the Government whose duty it should be to periodically visit and systematically inquire into the general management of these institutions. This leads up to the subject of hospital abuse, and we must compliment the Commission upon the broad view that it takes of this subject. The Commission points out that under the present arrangement beds in hospitals are occupied by three classes of patients who ought not to be admitted:—1st. By those capable of paying for medical attendance at their own homes, or in private hospitals. 2nd. By those who could be treated at their own homes by the staff of visiting medical officers of a completely organised free dispensary. 3rd. By those who have to be treated in general hospitals because no suitable provision exists for them in the hospitals managed entirely by the Government, from the nature of their infirmities due to old age, poverty, etc., and their attendant necessities. Proper provision should be made for such cases in connection with the Government Asylums for the Infirm and Destitute, and it is pointed out that properly built, properly equipped, and properly managed hospitals, having wards set apart for special cases, and corresponding in general arrangements with the Sick Asylums now so numerous in England which have grown out of and replaced the sick-wards in poor-houses. Such hospitals, it is said, could be managed efficiently and with all due liberality at a cost per bed very considerably less than the present expenditure in general hospitals.

The Commission somewhat roughly criticises the kind of partnership that has hitherto existed between the Government and the Sydney and Prince Alfred Hospitals. The Government has granted valuable building sites, and has given the sum of £268,933 to the building funds of these hospitals, this being 77·4 per cent. of the total sum expended in their erection, in addition to which the sum of £14,000 a year for the treatment of pauper patients as well as £700 a year for the maintenance of a dispensary, and £350 a year as rent for the building at Moorcliff. The sums spent by the Government on these palatial buildings with a capacity of 554 beds seem to have led to inadequate results, for it is pointed out that a similar sum could have provided at, say, £200 per bed for 1,345 beds in one or more well built and well equipped Government hospitals for decidedly less than the sum annually paid

for the maintenance of pauper patients, and it could for years past have maintained these patients far more economically in its own hospitals. Yet the directors of these hospitals have recently clamoured for an increase of 1s. per diem per head on the 3s. already paid by the Government. It is properly suggested that the existing state of affairs imperatively demands a re-adjustment of the arrangements now existing between the Government and these hospitals. Members of the Commission are unanimous on a point upon which we have been harping since the advent of *The Australasian Medical Gazette*—that hospital charity in this colony has been abused by a number of persons who have no claims upon it whatever. Assuming that the hospitals are mainly Government institutions, many, well able to pay for medical attendance, claim such from the hospital as pauper patients, while those who partially pay for their maintenance in hospital have a commercial instinct aroused within them to make the best bargain possible regardless of the equity of the case. Some flagrant cases have occurred where patients coming to Sydney for operations evade the fees which should be charged by their own medical attendants in the country, or those whom they consult in Sydney, by getting admission to the hospitals under the plea of poverty. The hospital authorities have signally failed in arresting such abuses by making the necessary inquiries.

With reference to the country hospitals generally, and those of the suburbs of Sydney, the report speaks very favourably. They are said to be well conducted, and, on the whole, very considerable interest is taken in their management in the district in which they are situated. Yet, there is a fly in the amber. In some instances there are great defects in the hospital buildings, some of which are ill-planned and totally unsuitable—a great need of the necessary equipment and grave faults in the administration. Some hospitals are associated under the same roof with asylums for the destitute under circumstances antagonistic to good hospital work, especially aseptic operative surgery. The defects do not appear to be adequately appreciated by those in authority.

The question regarding the suitability of patients being treated in public hospitals on payment of fees to the hospital: contribution to, or part payment of their maintenance, or being treated upon partly charitable principles, is most ably discussed, and we think the generality of the profession will agree with the following statement:—"We find a general consensus of opinion that private wards in the

main general hospitals are neither necessary nor advisable in Sydney nor in any city where the population is sufficient to allow of the establishment of private hospitals on a satisfactory basis."

The richer class of patients can get thoroughly suitable accommodation, care and treatment at varying rates, none of which seem excessive, in the private hospitals which now exist, and are increasing in number. But there is admittedly a gap in the hospital accommodation in the shape of provision for patients able only to pay from one to two guineas a week. This gap will probably be filled by private enterprise, and hospital accommodation afforded at rates which people of very moderate means can, or should be, able to afford if the general hospitals no longer admit remunerative paying patients, and we trust that attention having been drawn in the report to this urgent requirement, private enterprise will be stimulated to meet the want.

The report then goes on to iterate and illustrate the many abuses of the out-patients' department in the various hospitals, and speaks favourably of the training and hours of duty of nurses, gives a short resumé of private hospitals, and concludes with the following recommendations:—

1.—That all subsidised hospitals shall be periodically visited by an officer of the Government who shall have power (i.) To audit the accounts at any time; (ii.) To ascertain if the funds are expended for proper purposes, with regard to economy; (iii.) To see that the bye-laws are carried out in their integrity; (iv.) To report generally on the management of the institution with a view to bringing under the notice of the Government and the Committee any defects that may in his opinion exist in connection therewith.

2. That a thorough inquiry by a Government officer, and a favourable report as to the necessity for the establishment of any new hospital, should be conditions precedent to the granting of Government assistance either to build or maintain that hospital.

3. That model plans for country and district hospitals be prepared by the Government as guides to local committees in the construction of new hospitals.

4. That the Government subsidy of £ for £ be continued both in regard to funds collected for the building and equipment, and also for the maintenance of hospitals; but that special grants in cases where no like amount is raised by subscription or otherwise, should not in future be given.

5. That, as hospitals can, except under very

special circumstances, be suitably built and adequately equipped at a cost of £200 per bed, the Government subsidy towards the building fund should not exceed the amount of £100 per bed.

6. That the Government subsidy should only be granted where it is shown on the report of the inspecting officer, that all regulations made by the Government are acted upon, and that an efficient system of inquiry as to the pecuniary position of both in-and-out-patients, is carried out.

7. That Government aid be withdrawn from the Silverton and Bulli Hospitals, and the special attention of the Inspecting Government Officer drawn to the question of the advisability of continuance of Government aid to all hospitals in which the average annual cost per bed is exceptionally high.

8. That in the absence of any local poor law administration, the Government should provide and maintain in connection with the Asylums for the Infirm and Destitute, one or more hospitals on the model of the sick asylums under the Poor Law Board in Great Britain, and that, when these are available, the patients sent by the Government to the Sydney and Prince Alfred Hospitals, should be only such cases as require special operative measures, or cases of emergency which would be prejudiced by delay in treatment.

9. That the administration of the Coast Hospital be removed from the control of the Medical Adviser, to that of the Director of Government Asylums for the Infirm and Destitute, and that the institution be worked in connection with the Asylums for the Infirm and Destitute, and the hospitals or sick asylums above recommended, and that it be utilised (a) for cases of infectious disease, until other provision for these cases is made, (b) for lock cases in men and (c) for ordinary hospital cases which will not be prejudiced by the journey.

10. That the tramline be extended to the Coast Hospital from the Botany terminus, and the patients taken by special ambulance conveyance at fixed times.

11. That a Lock Hospital for Women, with not less than 30 beds, be established in Sydney, and conducted under the Department of Government Asylums for the Infirm and Destitute.

12. That the Government should cease to pay the rent of the buildings occupied as an Ophthalmic Hospital at "Moorecliff," in connection with the Sydney Hospital, on the expiry of the present lease, and that the more chronic ophthalmic cases be treated in one of the hospitals or sick asylums under the Department of Government Asylums for the Infirm

and Destitute; and those cases which are of a more acute character, or require operative treatment, in the Sydney and Prince Alfred Hospitals.

13. That the Regent-street Dispensary should be discontinued, and the Government grant cease, and that Government assistance should be given in aid of a free dispensary, on the lines of such institutions in the mother country, from which patients in destitute circumstances could be treated, either at the institution or at their own homes, by a competent medical staff, and receive the necessary medicines, etc.

14. That all private hospitals be placed under Government supervision, provided for by Act of Parliament, in some such manner as exists in the neighbouring colony of Victoria; and that they only be allowed to continue their work under a license granted after inspection by a competent authority.

We shall, in a future issue, comment upon some further points in this report.

HOSPITAL ABUSE.

A SPECIAL General Committee of the Bradford and District Medico-Ethical Society was called for February 15th, 1899, to consider the question of hospital abuse. Adjourned meetings were held February 24th, March 8th, 14th, 22nd, and 28th, April 7th, 13th, and 27th. The resolutions passed were eleven in number, and were as follows:—

1. *Medical Relief is Charity.*—That in the opinion of this Society it is of the first importance that the boards of management of public hospitals and the public generally should recognise the principle that medical relief is charitable relief, and that the hospital funds are provided in trust for the benefit only of the sick who are unable to pay when suffering from serious ailments, and that it is not only dishonourable but dishonest for other persons to take any part of these funds.

2. *Wages Scale.*—That the Bradford and District Medico-Ethical Society approve the following wages scale for use in our hospitals:—For 1 person when in work, 18s. per week; for 2 persons when in work, 23s. per week; for 3 persons when in work, 28s. per week; for 4 persons when in work, 31s. per week, with 3s. for each additional member of family. That cases of long-continued illness or cases for serious operation should be considered exceptional, and should be recommended by their medical man.

3. *Inquiry Officer.*—That the necessary inquiries as to the inability of applicants for medical charity to pay for treatment at home cannot be satisfactorily made except by a special inquiry officer, and that all cases should be inquired into by such an officer.

4. *Serious Cases.*—That no patient who is excluded by the wages scale ought to be entitled to receive medical charity unless suffering from an ailment of so serious a nature that it cannot be properly treated except in hospital.

5. *No Small Payments to be taken.*—That the ac-

ceptance of small payments from patients in receipt of medical charity, whether as a contribution towards the cost of maintenance or in return for medical treatment, is highly undesirable. This is not intended to interfere with voluntary contributions by grateful patients after the treatment in hospital has been finished.

6. *Recommendations.*—That the system of giving recommendations to subscribers is objectionable, is greatly abused, and should be abolished.

7. *Casualty Patients.*—That casualty patients should receive first aid, and then if above the wages limit be referred to private medical men.

8. *Dental Extractions.*—That cases of simple extraction of teeth should be inadmissible.

9. *Out-patients.*—That out-patients shall be admitted to the hospitals without charge, subject to inquiry as to their monetary suitability. That patients sent by their medical men for a second opinion, but not for hospital treatment, shall be eligible without inquiry by the inquiry officer.

10. *In-patient Department.*—That in-patients shall be admitted according to the wages scale, exceptions being made when operations are required, or when other extraordinary circumstances obtain. That no paying patients shall be admitted as such.

11. *Home Patients.*—That the home-patient department, as carried out in connection with the Bradford Royal Infirmary, is much abused, objectionable in principle, and should be abolished.—*British Medical Journal.*

A TRAGIC DEATH.

THE LATE DR. E. P. VINES.

THE tragic death of Dr. E. P. Vines at Braeside Station, W.A., in September, whilst attending Mrs. Hodgson, the wife of the proprietor, forms an instance of one of the many perils surrounding the practice of our profession. A number of aborigines attacked the homestead before daybreak. Mr. Hodgson was sleeping outside the house with one of the children. He was awakened by the barking of the dogs. He sat up and was immediately speared in the shoulder. He shouted to his wife and Dr. Vines that the natives were attacking them, and at the same time received other spear wounds. Dr. Vines rushed out, and received two spears in the chest, one of which wounded the heart. He turned into the house, and exclaimed "I'm done," and expired. The patient got out of bed, took a revolver, and fired at the natives, who thereupon decamped. This plucky act of the patient saved the lives of all the others of the household. She subsequently gave birth to a son. We cannot bestow too much sympathy, encouragement and praise upon those of us who carry out their life work in the back blocks and distant parts far removed from help and civilisation. It can truthfully be said of Dr. Vines that he died in the execution of his duty—one of the highest privileges to which mortal man can aspire.

THE UBIQUITOUS REVOLVER.

It seems somewhat anomalous that if a farmer wishes to procure some arsenic to make a sheep wash, or carbolic acid with which to prepare a lotion, he has to purchase these ingredients from a pharmaceutical chemist, and has to go through the formality of having his name and residence entered in a book, and, if necessary for the satisfaction of the vendor, to be identified by two witnesses; while, were it his ambition, in a fit of frenzied jealousy to shoot his sweetheart, he can buy any form of firearm without the slightest let or hindrance.

Recent events in these colonies have given prominence to the unrestricted use of firearms; in fact, scarcely a week elapses but we are shocked by hearing of some attempted homicide, murder, suicide or accident caused by the use of firearms. This increase in the number of bullet wounds has attracted considerable attention lately in London, and it has been asserted as a remarkable fact that the surgeon to a civil hospital in a given time and in a large town may absolutely see more cases of bullet wounds than his military brother does in a time of war. The remedy is not far to seek. No one should be allowed to have in his possession any kind of firearm without a license, and to obtain that license certain restrictions and formalities should be made necessary, not so much with a view of obstructing the legitimate use of guns and pistols, but to impress on the possessor of such deadly weapons the responsibilities that devolve upon the owner. Had such restraining influences to the ready purchase of weapons been enforced only a few months ago, some hastily criminal acts which have led to the execution or gaoling of those who became criminals upon the impulse of the moment would not have occurred. The fee for such a license may be so fixed as to materially increase the revenue of the colony.

NOTIFICATION OF TUBERCULOSIS IN NEW SOUTH WALES

At the instance of the Municipal Council of Marrickville, and in pursuance of a resolution carried by Alderman Dr. Perkins a few weeks ago, a conference of delegates of suburban municipalities was held in the Equitable Hall, George Street, Sydney, on Tuesday evening, September 26th. The Mayor of Marrickville (Alderman W. W. Clarke) presided, and included in the attendance were Aldermen W. R. Benson, J.P., W. T. Henson, James Gould, H. A. Langley (Marrickville), J. G.

Griffin, J.P. (ex-mayor of Hurstville), W. Taylor (ex-mayor of Rockdale), R. Adams (Waterloo), and W. Troup (Leichhardt).

The Chairman, in explaining the object of the conference, said that upwards of twenty replies had been received from councils in the metropolitan area who agreed to co-operate in this matter. He was personally very proud of this liberal response, as he regarded the preservation of public health as the first function of municipal life. (Applause.) It seemed to him that the salubrious climate of this colony made it a dumping ground for persons suffering from pulmonary diseases all over the world. He had the honour of introducing Dr. Perkins, one of their own Australasian medical students, who had given this and other matters affecting the public health very careful consideration.

Alderman Dr. Perkins, who was warmly received, said he desired to express his very great appreciation of the manner in which suburban aldermen had agreed to co-operate in this matter. He read an exhaustive paper on the question, and pointed out the enormous mortality of the older countries and this country from this peculiar disease. Then he showed that certain countries, recognising the fact that tuberculosis is a preventable disease, had taken legislative action in the direction of prevention. He quoted Germany, France, Belgium, New York, Washington, and South Australia where tuberculosis had been made a notifiable disease. South Australia, during the present year, had passed a Public Health Act, in a section of which tuberculosis was made a compulsory notifiable disease among others. In New York, which had perhaps the most complete system of legislation for dealing with this disease, the death rate had gone down in a very marked degree since the introduction of these measures. During the present year, Washington had taken up this matter, and passed a law dealing with this subject and making it a notifiable one. He mentioned the fact that the president of our own Board of Health drew the attention of the Government in 1897 in a minute to the prevention of tuberculosis in man and animals, and to the fact that it was entirely preventable in both. In the report he gave a series of suggestions as to the means for the prevention and spread of consumption, as well as for its eradication. Dr. Perkins also quoted the appalling figures given by Dr. Camac Wilkinson in a recent letter published in the *Hera'd* while dwelling on the serious nature of the disease. He contended that municipal councils had the best adaptable means for dealing with this matter in the way of prevention. He enlarged on the educative effect of measures of notification among the ignorant masses, consequent on the disease coming under the scope of the operations of public health. He concluded by moving,—"That this conference of municipal representatives, recognising that tuberculosis is a preventable disease, is of opinion that a large annual loss of valuable lives and the enormous suffering caused by tuberculosis demand vigorous and concerted action being taken for the prevention of its spread and for its eradication."

Alderman Troup (Leichhardt) seconded the motion, which was supported by Aldermen Benson (Marrickville) and Adams (Waterloo), and carried unanimously.

Alderman Griffin (Hurstville) moved,—"That as early information of the recurrence of tuberculosis and prompt action in relation thereto are necessary for the sparing of many valuable lives, this conference is of opinion that compulsory notification should be instituted by the Government, and as the local authorities

have at hand the most readily adaptable machinery for preventing the spread of the disease, the necessary powers should be vested in such authorities to take action in regard to the same." He thought Dr. Perkins deserved the thanks of the community for the efforts he had made in this direction. (Hear, hear.)

Alderman Adams seconded the motion, which was agreed to.

Alderman Taylor moved,—"That a deputation consisting of the aldermen present, together with the Mayors and aldermen of the municipalities who have agreed to co-operate, be appointed a deputation to wait upon the Premier, and to urge that tuberculosis in human beings be made a notifiable disease under the Public Health Act; that the members of Parliament willing to assist in this movement be invited to accompany the deputation."

Alderman Henson seconded the resolution. Alderman Adams spoke in support, and it was agreed to.

Alderman J. G. Griffin moved,—"That the thanks of this conference be tendered to Alderman Dr. Perkins for his able and exhaustive address, and that he be requested to have same printed."

Alderman Taylor (Rockdale) seconded the motion, which was supported by Alderman Adams, and carried unanimously.

Dr. Perkins, in responding, said he would be pleased to carry out the suggestion to have the address printed.

The proceedings concluded with a vote of thanks to the chairman.

LONDON LETTER.

Hot Weather in England—Annual Meeting of British Medical Association—Ventrnor Consumption Hospital—The University of London.

THE last few weeks have forcibly reminded us of the Australian summer time. With a daily shade temperature varying from 80° to 85°, and very little breeze, it is not to be wondered at that the heat in London has been extremely oppressive; and not only in London, but all over England the same high temperatures have been recorded. The prolonged dry weather is also causing some anxiety among the water companies, the water in the Thames being drawn upon to a very large extent is steadily diminishing, and is less in amount now than it has been for several years past. The serious effects of the hot weather in London are revealed by the Registrar-General's returns, which show a rise in the death-rate from about 15.5 per 1,000 to over 25 per 1,000. The increase is said to be due to the large number of cases of infantile diarrhoea. It is also reported that a fever wave is passing over London, and diphtheria is very prevalent in the East End and in the South-east part of the Metropolis.

The annual meeting of the British Medical Association at Portsmouth was a great success, though not in point of numbers. The weather was hot and sultry, and with a light sea wind rendering the atmosphere very moist it reminded us of Sydney. Under these circumstances it is easy to understand that the scientific energies of the members were not at their best, and though some good work was done in the different sections, the larger number of members preferred to spend the time in excursions and sightseeing. At one of the general meetings not even a quorum of twenty-five members was present. This may not have been due so much to indifference on the part of members to the welfare of the Association as to a dislike to spend two or three hours in a close atmosphere

listening to a few malcontents anxious to advertise themselves by airing imaginary grievances. It is only now and again that epoch-making discoveries can be announced, and hence all annual presidential addresses, and addresses in the special subjects must be more or less a repetition of what has been said several times before. The President's Address, however, much more in the manner of its delivery than in the matter, was a striking feature in the programme.

A lady practitioner has recently been appointed second medical officer to the Bethnal Green Infirmary, in the East End of London. A day or two after her appointment an old woman, who had been admitted for pneumonia, died, and in due course Miss Knowles reported the case, and, having performed a *post-mortem* examination, gave her evidence before the coroner and jury. It is said that this is the first time that a lady doctor has performed a *post-mortem* examination for a coroner's inquest.

A new block, making the eleventh, has recently been added to the Consumption Hospital at Ventrnor, Isle of Wight. This has been built in memory of Prince Henry of Battenberg, and was opened by the Princess Beatrice last week in place of the Queen, who had intended performing the ceremony herself. The new building provides accommodation for twenty-one more patients, and is surrounded by spacious balconies and verandahs, wide enough to admit of the patients' beds being wheeled out of the wards, so that they may get the full benefit of the southern aspect of the hospital.

The University of London question has been partly solved, at any rate temporarily, by its transference from the present buildings in Burlington Gardens to the Imperial Institute at South Kensington. The building for the Imperial Institute was quite unnecessarily large, and the University offices and examination halls are now to be located at one end of the building, which will give them five times the accommodation at present available at Burlington House. It is a pity that no more central position could be found for the University, and its new situation, near to the Royal College of Science at Kensington, must excite some fears in the minds of the authorities of University and King's Colleges, as well as of the other metropolitan medical schools, that an attempt will be made to secure all the preliminary scientific training of medical students for the Royal College of Science. The offer of the University College authorities to give up the whole of their buildings for the University was rejected, as was to be expected, considering the amount of jealousy and rivalry between the various medical schools. The question of the teaching University is still in abeyance, and, in consequence of the large vested interests involved, is likely to remain so for a long time yet.

London, August 19th, 1899.

REVIEW.

ENLARGEMENT OF THE PROSTATE, ITS TREATMENT AND RADICAL CURE. By C. Mansell Moullin, M.D. Oxon., F.R.C.S., Surgeon and Lecturer on Surgery at the London Hospital, etc., etc. Second Edition. 211 pages 8vo.; price 6s. London: H. K. Lewis.

In this edition the author has omitted many of the operations on the prostate which were described in the first edition, as they were chiefly of historic interest. The book is divided into eleven chapters which deal with:—I. The Normal Structure and Function of the

Prostate. II. The Enlarged Prostate. III. The Causes of Prostatic Enlargement. IV. The Effects of Enlargement of the Prostate. V. The Symptoms of Prostatic Enlargement. VI. Diagnosis. VII. The General Treatment of Enlargement of the Prostate. VIII. and IX. The Local Treatment of Enlargement of the Prostate and its Complications. X. The Radical Treatment of Enlargement of the Prostate. Partial Prostatectomy. XI. The Effect upon Enlargement of the Prostate of Orchidectomy and of Operations upon the Structures contained in the Spermatic Cord. The author emphasises the fact that the function of the prostate is entirely sexual: it does not take any part in micturition. In the preface the author commits himself to the following statement:—"There is now no case of enlargement in which perfect relief cannot be obtained, provided only the secondary consequences which so often and so entirely unnecessarily follow it, and which are due in the vast majority of instances to the careless use of catheters, have not been allowed to work irreparable harm upon the walls of the bladder." In discussing the radical treatment the author gives first place to Supra-Pubic Prostatectomy (McGill's Operation) as the most generally useful. Dr. Mansell considers vasectomy as far inferior to orchidectomy, in fact, he doubts whether the mere division of the vasa deferentia without including some of the nerves of the cord is of any permanent value.

The book is well worth the study of those interested in bladder surgery.

(For other Reviews see page 475.)

PUBLIC HEALTH.

At a meeting of the Municipal Association held recently in Melbourne the metropolitan members of the executive committee brought up a report upon the subject of controlling the milk supply. The following recommendations were adopted:—That the fee for the registration of dairymen, cow-keepers, and purveyors of milk be \$1 a year; that dairymen be required to register only in the district in which they resided; that persons intending to commence carrying on the trade of dairymen cow-keepers or purveyors of milk in any municipal district be required to give fourteen days' notice thereof, and the registration not to be effected unless the health officer or the inspector of the municipality reports that the premises of the applicant were suitable for the storage of milk, or the keeping of cows; that councils be empowered to refuse to register any dairyman or milk vendor, or to cancel the registration of such persons whose premises are in an unsatisfactory condition; that dairymen or milkmen who keep milk in a sleeping apartment, or in a room communicating with a sleeping apartment, be liable to a penalty; that every dairyman and cow-keeper be required, in April and October of each year to specially cleanse the portion of his premises in which cows are kept, and to give the walls a coating of lime wash containing carbolic acid or other suitable disinfectant; that the council of any municipality within the metropolitan area, and also the council of any city, town or borough in any part of the colony, be empowered to make a by-law to prohibit the grazing of cattle on unfenced land. The committee also recommended that the existing arrangement for the analysis of samples of milk be not continued, and that the conference take into consideration the advisability of all the metropolitan municipalities entering in an agreement to jointly appoint an analyst on terms to be arranged. It was believed, the Committee's Report added, that the adoption of such a

proposal would result in a considerable saving, and permit of a larger number of samples of food being analysed during each year. A return by the secretary of the Association, showed that the municipal analyst was receiving a salary of \$150 from the City Council and annual payments of from \$50 to \$5 from the other cities, towns boroughs, and shires in the metropolitan area, making the total payments \$590 per annum. The Report of the committee was adopted, an amendment, that the existing arrangements be adhered to, being negatived by a narrow majority. The committee reported, on the subject of the inspection of dairy herds, that the evidence which was from time to time presented as to the existence of tuberculosis in a very marked form in cows that were to all appearance free from disease indicated the urgent necessity of a systematic and vigilant inspection of all dairy herds. It was, therefore, recommended that the matter be brought under the notice of the Premier, with a view to such measures being at once adopted by the officers of the Department of Agriculture, in conjunction with the veterinary surgeon of the Board of Health, as would result in the destruction of all dairy cows suffering from disease. This recommendation was unanimously adopted.

Mr. T. A. Coghlan, statistician of New South Wales, has published a very interesting work entitled "Child-birth of New South Wales: a Study in Statistics." It contains a large amount of extremely important facts in connection with the decreased birth-rate in the colony, to which we have so often referred during the past year. Mr. Coghlan's work should be studied carefully by everyone who has the welfare of Australia at heart. It is published by the Government Printer Sydney.

HOSPITAL INTELLIGENCE.

LAUNCESTON HOSPITAL, TASMANIA.—Dr. McArthur has resigned his position as House-surgeon. The Board has been informed that the Government will not at present grant money for the establishment of a bacteriological laboratory at the hospital.

HOSPITAL FOR WOMEN, LAUNCESTON, TASMANIA.—The annual report of the Queen Victoria Hospital for Women, read at the annual meeting recently, stated that the number of patients treated at the hospital showed a steady increase upon those of last year, and in several instances it had not been possible to admit applicants desirous of entering as patients, owing to lack of accommodation. During the year 91 patients had been treated, 16 of whom were in surgical wards, and the remainder in the maternity ward. Twelve of the former underwent operations, and all of them progressed satisfactorily. No deaths had taken place at the hospital during the year just closed. Seventy-seven infants had been born in the hospital during the year, as against 50 in previous year. Of these, 39 were females and 38 males. Fees paid in by patients had varied according to the circumstances of those admitted. Eleven district patients had been attended by nurses from the hospital, and the committee were glad to note this was a branch of work which was highly appreciated by those mothers who could not afford to pay for skilled nursing, and were yet unable to leave their homes to become indoor patients.

HOBART HOSPITAL FOR INFECTIOUS DISEASES.—It is now definitely settled that a new building is to be erected upon a suitable site to be chosen after communication with the Health and Hospital Boards.

WOMEN'S HOSPITAL, MELBOURNE.—A serious difficulty has arisen in connection with the method of

electing the hospital staff of this institution. Allegations have been stated to the effect that the doctors pooled for votes, that children voted, and that there were non-existent subscribers.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF SYDNEY.

MR. L. E. F. NEILL, B.A., M.B., Ch.M. Univ. Syd., has been appointed Surgical Tutor.

UNIVERSITY OF EDINBURGH.

At the last graduation ceremony, held on Saturday, July 29th, the following Australasians graduated:—*Doctor of Medicine*: J. H. Crawford, M.B., C.M., 1891*; J. D. Doherty, N.S.W., M.B., C.M., 1897*; W. H. Goldie, N.Z., M.B., C.M., 1897*; W. J. Munro, N.S.W., M.B., C.M., 1884***; H. V. Munster, M.B., C.M., 1894; L. J. H. Oldmeadow, Tas., M.B., C.M., 1892*; T. W. Parkinson, N.Z., M.B., C.M., 1890. (* Commended for his Thesis. ** Highly commended for his Thesis. *** Awarded a gold medal for his Thesis.) *Bachelor of Medicine and Bachelor of Surgery*: Barclay, W. J., N.Z.**; Bell, J. G., Australia; Dawkins, S. L., Australia; Ewart, D., N.Z.*; Ewart, W., N.Z.; Gilmer, H. A. A., N.Z.; Gribben, St. L. H., N.Z.; Herbert, W. E., N.Z.; MacDonald, P. N. M., N.Z.; Melhuish, E.T., N.Z.; Nankervill, A. W., Australia; Price, T. A., Australia; Wilson, H. D., Australia. (* First Class Honours. ** Second Class Honours). The Ettles Scholarship was awarded to W. J. Barclay, B.A., M.B., Ch.B., New Zealand, who also gained the Buchanan Scholarship. Dr. W. J. Munro, of Sydney, was one of the six Thesis Gold Medalists.

MEDICAL NOTES.

One Man One Billet.—Alexander Disney Leith Napier, M.D., etc., in addition to other positions in the patronage of the South Australian Government, has been appointed Assistant Colonial Surgeon and Senior Assistant Medical Officer at the Adelaide Lunatic Asylum, also a member of the South Australian Medical Board (*vice* the late Dr. Whittell). The opinion of the profession in South Australia upon this last action of Mr. Kingston's Ministry can be inferred from the fact that Dr. Alexander Stewart Paterson, who for some years has been hon. chairman of the Medical Board, has resigned. The following is a copy of Dr Paterson's letter:—"Feeling that by the appointment of junior members of the profession to the vacant seats at the board the claims of several men in Adelaide of long-standing and reputation have been ignored, I see no other way of protesting against the nepotism but by resignation of the office of president, which I hereby respectfully request you to accept."

Dr. Fraser, who was shot by his wife in Gray-street, St. Kilda, Melbourne, on September 23rd, and who has the bullet in his brain, is still alive.

Presentations to Medical Men.—Dr. W. C. WATKINS, of Manly, N.S.W., has been presented with a purse of 100 sovereigns by his friends as a mark of appreciation. Dr. O. H. REDDALL, of Randwick, N.S.W., has been presented with a handsome illuminated address, as a token of esteem and respect, from the Carrington Lodge, Randwick, No. 75, P.A.F.S. of A.

MILITARY INTELLIGENCE.

NEW SOUTH WALES.—The undermentioned officers having concluded No. 5, headquarters course, class "A," Medical School of Instruction, have passed with honours:—Captain A. E. Perkins, Army Medical Corps; Lieutenant M. O'Gorman Hughes, Army Medical Corps; Captain R. S. Pearce, New South Wales Artillery (field). The following officers passed:—Lieutenant G. L. Mullins, Army Medical Corps; Lieutenant G. Read, Army Medical Corps; Lieutenant C. A. Edwards, Army Medical Corps; Lieutenant J. H. Schwabe, New South Wales Artillery (field); Second Lieutenant T. L. Mullins, New South Wales Artillery (field).

NEW ZEALAND.—His Excellency the Governor has been pleased to approve of the following appointment:—*New Zealand Volunteer Medical Staff*: Patrick Wood Hislop to be Surgeon-Captain.

QUEENSLAND.—Surgeon Herbert Chesson has been appointed Captain in the Army Medical Corps of the Queensland Defence Force (land). Alexander Jack, M.B., has resigned his appointment as an Acting Sub-Lieutenant in the Queensland Defence Force (marine), and has been appointed a Surgeon in the same force.

WESTERN AUSTRALIA.—Captain Charles Swanston has been appointed Captain in the Medical Staff Corps.

OBITUARY.

DAVID COLLINGWOOD, M.D. Ch. B. Lond.; F.R.C.S. Eng.; M.D. (a.g.), Sydney. We regret to announce that information has been cabled from England of the death of Dr. David Collingwood, late of Summer Hill. Dr. Collingwood has been well known for the last fifteen years in the western suburbs of Sydney, where he enjoyed an extensive practice. When he first commenced practice in Summer Hill the district was very sparsely built upon, but lately, like many of the other suburbs surrounding Sydney, it has become very populated. He, in a professional sense, grew with the district, and when last June he left for Europe on a two years' holiday, his routine practice included daily visits from Stanmore to Homebush, while patients from remote parts of the colony were in constant attendance at his consulting rooms in Summer Hill. He was the son of a well-known English artist, and brother to one of the foremost art critics and writers on art in Great Britain. He was, himself, a man of wide culture and high attainments, beyond, as well as within his own profession, and the charm of his personality captivated all those with whom he came into contact. Physically, he seemed to be the embodiment of health and strength, a most earnest and indomitable worker, incapable of being tired or fagged out. He left for England, intending to take a long and well-earned holiday, during June of last year, and made his way to Birkenhead, where Mrs. Collingwood's relatives resided. Shortly afterwards, he caught a severe cold, and was laid up with congestion of the lungs. As the English winter was setting in, he was advised by his medical friends to lose no time in going south to Biskra, an oasis town in the Algerian Desert, where it was thought that the dry air would exercise a recuperative influence, but received no benefit from this change. Dr. Collingwood subsequently went to Hohenhonnef, in Germany. There he improved and gained considerably in weight, and was, according to recent letters, on the road to recovery

and looking forward to a short residence in Nordrach. The untimely termination of his life was caused by the rupture of a blood vessel in his lungs due to tubercular infiltration. Dr. Collingwood held the degrees of Doctor of Medicine and Bachelor of Surgery of the University of London, and the Fellowship of the Royal College of Surgeons, England. He was for many years Honorary Physician to Prince Alfred Hospital, Sydney; and also held the positions of Visiting Medical Officer, Infants' Home, Ashfield; Honorary Surgeon, Women's and Children's Hospital, Lewisham; Ex-President, Western Medical Association, Sydney; formerly Demonstrator of Anatomy and Practical Surgery, University College, London; House Surgeon, Physician, and Obstetric Assistant University College Hospital, London.

He was most popular with the general public and members of the medical profession, and the news of his untimely decease was received with profound regret.

GEORGE VEITCH GILROY, M.B. et Ch.M. Edin. 1886, formerly of Canterbury, near Melbourne, died at Nyngan, N.S.W., last month.

HERBERT LLEWELLYN BARKER, M.B., C.M. Edin. 1887, died from a revolver shot, self inflicted, in Sydney on September 17th. Dr. Barker was 35 years of age.

MEDICO-LEGAL.

Medical Magistrates.—CHARLES FREDERICK STEVENSON, J.P., L.R.C.S. Irel., has been appointed Member of the Licensing Court for the Licensing District of Berrima, N.S.W., vice R. P. Richardson, J.P., resigned. DONALD LUKER, J.P., M.B., Ch.M. Syd., has been appointed a member of the Local Land Board for the Land Districts of Brewarrina and Brewarrina East, N.S.W., vice P. D. McElligot, J.P., deceased.

CHANGE OF ADDRESS, ETC.

CORRECTION.—Dr. Laurence E. Ellis, of whom it was stated in August number that he had commenced practice at Wardell, has not done so, but is still at the Sydney Hospital for Sick Children.

BLANCHARD, Dr. D. F., has removed from Cue to Day Dawn, W.A.

COANE, Dr. JAMES, has left Yackandandah and is now at Beechworth, Vic., having purchased the practice of Dr. Pinniger at that town.

FISCHER, Dr. G. A. (late with Dr. T. K. Hamilton), has now commenced private practice as a Specialist in Diseases of the Ear, Eye, and Throat, at 74 Flinders-street, Adelaide.

HAMILTON, Dr. C. W., has returned from Europe to his residence, Victoria-square, Adelaide, S.A.

HOWSE, Dr. R. N., formerly of Taree, has succeeded to the practice of Dr. Van Someren, at Orange, N.S.W.

MAUNSELL, Dr. J., has removed from Onslow, to Roebourne, W. A.

MATHWIN, Dr. F. S., a recent arrival, has commenced practice at Nathalia, Vic.

MITCHELL, Dr. E. T., late of Kimberley, South Africa, has settled at Bodalla, N.S.W.

NEALE, Dr. ALFRED, has removed from Christchurch, N.Z. to Liverpool Street, Sydney, to practice only in diseases of the skin.

PULLEINE, Dr. R. H., has removed from Beaudesert to Gympie, Q.

RHODES, Dr. A., late of Yalgoo, W.A., has settled at Bransholme, Vic.

RYGATE, Dr. A. M., has removed from Wellington, to Bedangora, N.S.W.

TAYLOR, Dr. G. U., has succeeded to Dr. J. Gregg's practice at Wedderburn, Vic.

THORP, Dr. C. G., some months ago left Gladstone, Q. for Richmond, Tas.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced:

Blanchard, Dr. D. F., to be Health Officer at Day Dawn, W.A., vice Dr. C. H. Jones.

Borthwick, E. L., M.B., &c., to be a Public Vaccinator for South Australia.

Coane, Jas., L.R.O.P. Edin., &c., to be Visiting Surgeon to the District Hospital, Beechworth, Vic., vice Dr. Pinniger, resigned.

Orommell, C. E., M.D., &c., to be Medical Attendant to the Aborigines at Casino, N.S.W.

Dean, Dr. M. C., to be Resident Medical Officer at, and to be Public Vaccinator for the Urban, Suburban, and Rural Districts of Bridgetown, W.A.

Desmond, Mr. J., has been appointed Government Veterinary Surgeon and Chief Inspector of Cattle to the Central Board of Health, Adelaide, S.A.

Hughes, M. O'Gorman, B.A., B.Sc., M.B. Syd., to be Hon. Assistant Surgeon, St. Vincent's Hospital, Sydney.

Jones, R. H., M.B., S.S. Melb., to be Hon. Assistant Oculist, St. Vincent's Hospital, Sydney.

Littlejohn, E. Sydney, B.A. Syd., M.D., C.M. Edin., to be Hon. Medical Officer to the Outpatients' Department, Sydney Hospital for Sick Children.

Maunsell, Dr. J., to be District Medical Officer for Roebourne District, also to be Public Vaccinator for the Urban, Suburban, and Rural Districts of Roebourne, and Quarantine Officer for Port of Cockatoo, W.A.

Mullen, W. L., M.D., &c., to be Acting Medical Superintendent Metropolitan Lunatic Asylum, Vic., vice Dr. W. B. Smith, absent on leave.

Smyth, Robert, L.R.O.P., &c., to be a Public Vaccinator for South Australia.

Steel, John, M.B., &c., to be Acting Medical Superintendent of the Yarra Bend Lunatic Asylum, vice Dr. W. L. Watkins, absent on leave.

Taylor, G. U., M.B., &c., to be Officer of Health for the North and Central Ridings of Korang Shire, vice Dr. Jas. Gregg, resigned.

MEDICAL VACANCY.

LAUNCESTON GENERAL HOSPITAL.—Applications to fill the position of House Surgeon will be received up to 4 p.m., the 28th instant. Salary, £200 per annum, with quarters, board, fuel, and light. Duties to commence 1st December next. Testimonials to accompany applications. Applicants must be unmarried. Apply to GEO. COLLINS, Chairman of the Board of Management.

REVIEWS.

(Continued from page 475.)

ON THE METAMORPHOSIS OF THE YOUNG FORM OF *Filaria Bancrofti*, COBB [*Filaria sanguinis hominis*, LEWIS; *Filaria Nocturna*, MANSON], IN THE BODY OF *Culex ciliaris*, LINN., "HOUSE MOSQUITO" OF AUSTRALIA. By Thos. L. Bancroft, M.B., Edin.

In this paper, which was read before the Royal Society of New South Wales in June last, the metamorphosis of *Filaria Nocturna* in the body of the mosquito is shewn to take from sixteen to twenty days for its completion, instead of seven days as was thought; previous observers, endeavouring to follow Manson, were unable to keep their mosquitoes alive sufficiently long; the writer discovered a means by which mosquitoes may be kept alive in suitable glass vessels for upwards of two months; he feeds them on ripe banana. He explains how it occurred that Manson saw the final stage of the metamorphosis occasionally in what he thought were seven day old mosquitoes; these particular mosquitoes had imbibed filarated blood weeks before the time when they were captured, and already contained advanced stages of

the metamorphosis. Anyone may now easily verify Manson's work by merely placing two or three "house mosquitoes" under the mosquito net curtains of the bed in which a filarious person sleeps, preferably late at night, and when the person is asleep; the next morning the mosquitoes, which have sucked blood, are transferred to a large glass vessel and fed on banana; in twenty days every one of them will contain actively moving filariae.

Dr. Bancroft's researches are extremely interesting and valuable from a scientific point of view. The paper is suitably illustrated.

A SYSTEM OF MEDICINE BY MANY WRITERS.
Edited by T. Clifford Allbutt, M.A., M.D., LL.D., F.R.C.P., F.R.S., F.L.S., F.S.A., Regius Professor of Physic in the University of Cambridge, etc. Vol. vi. London: Macmillan and Co., Ltd, 1899. Price 25s., net.

The sixth volume of this well-known system contains the continuation of the Diseases of the Circulatory System, and Diseases of Muscles and the Nervous System.

The principal contributors to the volume are Sir R. Douglas Powell, Dr. F. T. Roberts, Sir W. T. Gairdner, Drs. Rolleston, Hale White, C. E. Beavor, Barlow, Head, Horsley, and the Editor, who write on Angina Pectoris, Diseases of the Mediastinum, Aneurysm of the Aorta, Diseases of the Lymphatics, Thomsen's Disease, Idiopathic Muscular Atrophy and Hypertrophy, Raynaud's Disease, Trigeminal Neuralgia, Diseases of the Vertebral Column, and Adiposis Dolorosa respectively.

The volume, consisting as it does of contributions by the leading scientists of Great Britain, is one of the best on the subjects of which it treats. It is fully equal to its predecessors in the series.

It is well illustrated, and deserves to be ranked among the standard works of reference of the present day. The Editor is to be heartily congratulated on the result of his labours.

PROGRESSIVE MEDICINE: A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amosy Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia, etc., etc. Vol. II, June, 1899. Price 12s. 6d. net. London: Henry Kimpton; Sydney: L. Bruck.

This volume deals with "Surgery of the Abdomen including Hernia," by William B. Coley, M.D. "Gynecology," by John G. Clark, M.D. "Diseases of the Blood, Diseases of the Spleen, Thyroid Gland, and Lymphatic System," by Alfred Stengel, M.D. "Ophthalmology," by Edward Jackson, M.D.

The compilers of the various sections have succeeded in compressing into a fairly small compass a large amount of information concerning the subject dealt with. For instance, to take the "Surgery of the Abdomen, etc.," several methods of performing "Gastro-Enterostomy" and "Intestinal Anastomosis" are figured and described. Several modifications of the operations for Hernia are also figured and described, and their relative merits discussed. On the whole the compiler seems to think that Bassini's Operation still holds first place. Some interesting statistics regarding appendicitis are given, and apparently the tendency at present is not so great to operate on all cases and at all stages. The other sections dealt with are equally terse, and at the same time comprehensive. It may be said with-

out hesitation that this volume fully bears out what its title claims it to be, viz., a "Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences." The type, the paper, the illustrations, and the general get up of the volume reflect great credit on the publisher.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, have been duly registered as legally qualified medical practitioners in the respective colonies:—

NEW SOUTH WALES.

Goding, Frederick Webster, M.D., North Western Univ., Chicago, U.S.A., 1882.
Gundelach, Manuel, Physician and Surgeon, Univ. Chile, 1881.
Mitchell, Rodon Tregarthen, M.B., Mast. Surg. Univ. Edin., 1892.

NEW ZEALAND.

Blomfield, Edward Edridge, M.D., B.S. Lond., M.R.O.S. Eng., L.R.C.P. Lond.
Braucht, Frederick Elmer, M.D. Univ. of Lake Forest, Chicago, Illinois, U.S.A.

QUEENSLAND.

Davies, Alfred Joseph, Lic. B. Coll. Phys. Edin. 1890, Lic. B. Coll. Surg. Edin. 1890, Lic. Fac. Phys. Surg. Glasg. 1890.

SOUTH AUSTRALIA.

Prior, Guy Percival Underdown, M.R.O.S. Eng. 1898, L.R.C.P. Lond. 1898.
Woodside, Robert Neville, B.M. Melb. 1896, B.S. Melb. 1897.

VICTORIA.

Mathwin, Frank Sirett, M.B. of Ch.B. Viet. Univ., 1894.
Rhodes, Arthur, M.B., Ch.B. of B.A.O. Dubl. 1894.

Additional qualification registered.

Scott, Robert, M.D. Glasg. 1899.

BIRTHS, MARRIAGES, AND DEATH.

BIRTHS.

BOWKER.—On the 29th September, at Woolahra, Sydney, the wife of R. Steer Bowker, of a daughter.
KINROSS.—On the 16th September, the wife of R. Menzies Kinross, of Inverell, N.S.W., of a son.

MARRIAGES.

AYRES—ST. GEORGE.—On the 7th September, at Christ Church, Sydney, by the Rev. G. Trower, M.A., Charles Ayres, M.B., C.M. Edin., son of the late Thomas Ayres, of Sydney, to Lucy, second daughter of the late William Glascock St. George, of Mount Remarkable, South Australia.
HEWLETT—LINCOLN.—On the 23rd August, at Christ Church, St. Kilda, Melbourne, by the Rev. J. Stanley Low, Herbert M. Hewlett, M.B., R.C.P. Edin., of Nicholson-street, Fitzroy, to Dottie, eldest daughter of Thomas W. Lincoln, "Reesda," St. Kilda.
MATHWIN—WILSON.—On the 2nd September, at St. Hilary's Church, Kew, Melbourne, by the Rev. H. Collier, Frank Sirett Mathwin, M.B., Ch.B., of Nathalia, son of Henry Mathwin, B.A., J.P., of Southport, England, to Gertrude, fifth daughter of the late William Wilson, of Walton Priory, Liverpool, England.

DEATH.

COLLINGWOOD.—On the 23rd September, suddenly, of hæmorrhage, David Collingwood, M.D. Lond., F.R.O.S. Eng., aged 42. [By cable.]

TO MEDICAL MEN.—Applications are invited for the position of Doctor to the Mount Garnet Hospital. Salary, £300 per annum, with right of private practice. Applications, accompanied by copies of credentials, with statement of age, whether married or single, to be in the hands of the Secretary on or before November 30th, 1899.—J. M. POTTER, President, Mount Garnet Hospital.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

SARCOMA OF COLON.

BY BEN. POULTON, M.D., M.R.C.S. ENG.,
ADELAIDE.

READ BEFORE THE SOUTH AUSTRALIAN BRANCH OF
THE BRITISH MEDICAL ASSOCIATION, OCTOBER
26TH, 1899.

H.B., *æt.* 43 years, accountant. Always healthy. When 13 years old he jumped in the dark against a sharp-edged horizontal wooden bar, striking his abdomen about the navel; he was rendered insensible, and suffered abdominal pains for some weeks (he does not remember any of the symptoms). Nine years ago he strained his back in the loins when jumping, and has felt pain and weakness there at intervals ever since.

Twenty-seven years ago a doctor, when examining, found a lump in the lower part of his abdomen, which patient believes he has had ever since, but it has never given him any trouble. He had been very active till within the last few months, and is an enthusiastic bicyclist. His wife has noticed and remarked that he has aged greatly during the last two years, and previously to the present attack.

About ten weeks ago (end of May) the patient felt pain in the pit of the stomach, which was variable, and was attributed to indigestion. Two weeks later it became more severe, and persistent, and was accompanied by vomiting. Paroxysms became then so severe that he had to leave work and spend most of his time in bed owing to the pain, retching, and vomiting. No treatment gave relief beyond opiates.

On July 15th he came under observation complaining of intense pain beginning in the pit of the stomach and extending down left side and through to the small of back. The spasms of pain were almost incessant, and patient in the severest ones became doubled up like a trussed fowl. Bowels were rather confined, and the vomited matters an intense green with bile. Could get no sleep except under morphia. At first nothing could be detected on examination, but on July 17th, when the pain seemed easier, a hard rounded lump about the size of a small hen's egg could be felt just to the right of the umbilicus, but it soon slipped away out of reach on examination. All the organs seemed healthy as far as the pain would permit of examination. Very great abdominal tenderness; and palpation invariably caused a

paroxysm. Tongue fairly clean, but rather irritable and red. Urine normal; and no history of blood or gravel having been passed.

On account of the lump felt in the abdomen a consultation, with examination under ether, was suggested and arranged for next day, July 18th, when Dr. Poulton and Dr. F. Chapple were present. I am indebted to Dr. C. Magarey for these notes of the patient's personal history. He kindly asked me to see this patient with him on July 17th, when we found him suffering from severe abdominal pain, paroxysmal in character, and evidently causing great distress. The pain did not appear to be confined to any particular region of the belly; on palpation there was not found to be any marked distension or rigidity. Bimanual palpation discovered a small rounded lump in the lower right side, difficult to localise, and freely movable. Next day, Dr. Chapple giving ether, the lump was plainly felt as a firm rounded mass about the size of a billiard ball, midway between the umbilicus and anterior superior iliac spine. I was unable to determine whether the tumour was intestinal or mesenteric; but thought it was probably an old dead shrunken hydatid sac, which had contracted intestinal and, perhaps, omental adhesions.

An exploratory section was recommended and immediately agreed to, and for this purpose he at once went to the Wakefield-street Private Hospital.

Admitted at 5 p.m. the same day the temperature was 100°. There was little or no expression of pain; he was put on milk diet and a 1-3000 perchloride abdominal compress applied. He slept about an hour during the night, and had a morning temperature of 99°.

Early in the afternoon a copious evacuation of the bowels followed a soap and water enema.

Under ether administered by Dr. Chapple, at 3.30 p.m. I opened the abdomen with Dr. C. Magarey's assistance. Incision as for exploration of the appendix about four inches in length down to the internal oblique, separation of the fibres of this muscle and the transversalis. The fingers passed into the cavity soon detected the tumour, which was drawn out, and found to be in the head of the colon. No other tumour was felt. The invaded intestine removed from the cavity was packed round with hot wet towels. The appendix was long and thick, and contained solid lumps. It was removed, and a probe passed into the cæcum enabled one to estimate the consistence of the tumour and eliminate the possibility of a fecal impaction.

A transverse incision was now made below the growth which was extruded and demonstrated to have a broad attachment, not invading the mesenteric border of the gut. The tumour was rounded, mushroom like in shape, about an inch and a half in diameter, with a slightly smaller base. It was returned, and the exploratory incision clamped. Incisions were now made from the mesenteric border outwards through the gut wall on either side of the growth, and a quarter of an inch from its border, and the tumour removed. The two openings in the caput cæcum coli were closed by a double row of fine silk sutures, one traversing the two inner coats, the other Lembert's suture of the peritoneal coat. This took a long time, and the whole operation lasted a little over two hours.

Before closing the external wound with silk-worm gut, passed through integuments and external oblique only, a small gauze drain was carried down to the depths of the wound, and one suture opposite left untied.

In the long manipulation and exploration of the considerable coil of gut drawn outside the abdomen I think the fact that the muscular fibres were not cut across was of material aid: for although by this method the abdominal cavity is not made widely clear to view, and one learns more from the finger tips than by looking into the cavity; the invaded parts when drawn out were compressed by the muscular walls, and there was no trouble with extruding fluid contents.

The patient bore the operation well, but early in the evening had hiccough, and vomiting, and complained of great abdominal pain, which was relieved after the injection of $\frac{1}{4}$ gr. of morphia, but recurring $\frac{1}{2}$ gr. was given soon after midnight.

During the next forty-six hours there was very considerable pain associated with flatulence, and I departed from my usual custom so far as to give several doses of morphia—one grain in all during the first forty-eight hours.

There was the less hesitation about this as flatus soon passed per anum, and the pulse was not rapid; sips of hot water only were given for the first thirty-six hours, and then a little beef tea, the patient feeling weak and hungry.

After the last dose of morphia, forty-six hours after the operation, there was free bile-stained vomit and some retching, causing pain in the wound. Thereafter gentle feeding was commenced, and little further pain was experienced.

The gauze drain was removed on the eighth day and the suture tied; the temperature, which was slightly elevated previously, re-

mained normal from the fifth day, and the wound healed soundly.

The dietary scale was restricted until the eleventh day, when, after digital evacuation of the rectum, an action of the bowels was secured by a glycerine injection. The motion was black and bloodstained.

Next day full feeding commenced, and he was allowed to sit up in bed on August 1st. He was kept in bed for the next eight days, quite free from pain and discomfort, and urgently desiring to go home. The bowels were constipated, and glycerine injections were needed. A microscopic examination made by Dr. W. Cavenagh Mainwaring, Pathologist of the Children's Hospital, classes the growth as a round-celled sarcoma.

The rarity of intestinal growths other than the carcinomata of the lower bowel, seems to me sufficient warrant for the record of this instance, and its detection is entirely due to the care and attention of Dr. C. Magarey. I shall watch the sufferer from time to time, and will take a further opportunity of recording the results.

At the present time of writing, October 26th, the patient is going about freely, feels quite well, looks strong, and has gained considerably in weight. He has been for some weeks engaged actively at his ordinary office work.

Mr. Treves, in his work on "Intestinal Obstruction," 1899, says: "Sarcoma of the colon is very rare," that "it may appear as a sessile or polypoid tumour." In such case it is usually of the spindle-celled type, and is of slow growth. He does not record any case operated upon.

TRAINED MALE NURSE seeks engagement in mental or ordinary medical cases. Has had considerable experience in mental nursing, and is accustomed to travelling with patients to Europe and in the Australasian colonies. Unexceptional testimonials. References kindly permitted to Drs. F. N. Manning, Jarvie Hood, W. E. Warren, T. S. Dixon.

Address: R. T. O'NEILL,
5 Elizabeth Place,
Paddington, Sydney.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 24th November, at 8.15 p.m.

Business:—General.

G. T. HANKINS, Hon. Secretary.

HYDROTHERAPY IN TYPHOID.

BY F. E. HARE, M.D., BRISBANE.

At the recent session of the Intercolonial Medical Congress at Brisbane, members who took part in the discussion on typhoid confined themselves, for the most part, to the subject of hydrotherapeutics. With the exception of one member, the administration of antipyretic drugs was discountenanced, and some form of external refrigeration commended. All the old arguments against bathing, based upon the supposed dangers of inducing shock, collapse, internal congestions and catarrhs, hæmorrhages, etc., were conspicuously absent. It became simply a question as to the best practical method of securing antipyresis by external measures.

These measures included sponging, tepid and cold bathing.

Many were of opinion that sponging was sufficient for the majority of cases of mild pyrexia, and that bathing should be reserved for those that were exceptionally severe. It seemed to be assumed, with insufficient reason, that bathing is a procedure of necessity more severe upon the patients, more burdensome on the staff, and more expensive for the institution.

As regards expense, it was pointed out that if it was admitted that some patients required the bath the initial cost of the apparatus must be met. This cost need not exceed £10, and the further frequent use of the apparatus would entail no extra expense. It was not, however, thoroughly explained that systematic bathing was less severe and less troublesome than systematic sponging.

As regards severity, it is to be premised that either procedure, to be efficient, must be followed by a substantial fall in the internal temperature of the body, i.e., the temperature as registered by the thermometer in the rectum. Now it is a fact, which any may verify, that the rectal temperature is reduced much more rapidly by immersion in a bath than by sponging, however thoroughly done, the temperature of the water used being equal in both instances. The difference, I believe, is about as 3 is to 1. Fifteen minutes bath is as good as forty-five minutes sponging. If it is admitted with Brand that refrigeration should be used about every three hours, the element of time is of much importance.

These members of the Congress who visited the Brisbane fever wards were, I believe, impressed with the way in which the mechanical difficulties of lifting patients in and out of the

bath had been overcome. When once a small stretcher had been slipped under the patient, no further exertion on his part was called for, until he was again replaced in bed. Now quite as much disturbance of the patient is necessitated by the arrangement of macintosh sheeting, etc., for a general sponging. Indeed, if the sponging is to be really *general*, and not merely applied to the anterior surface of the body, much more disturbance to the patient will be entailed, for he will require to be constantly moved throughout the process from his back on to either side alternately. Three-quarters of an hour of such treatment is far more exhausting than one-quarter's complete rest in a bath, and three times as much of the nurse's time is expended. Any nurse of experience in the Brisbane Hospital fever wards will bear witness to the saving of time and trouble from using the bath as opposed to sponging.

There is another incidental advantage, which is of considerable practical value. While the patient is undergoing immersion, the nurse, set apart to watch him, has the opportunity of thoroughly shaking up the mattress and re-making the bed in a way never possible under the sponging treatment. At the end of his bath the patient returns to his bed to find it cool, fresh, and comfortable. In fact, he has all the advantages of two beds, a system so frequently advocated in text-books.

There is one point, however, which, so far as I know, has not hitherto been much insisted on. The temperature of the bath water can always be the same, and within certain limits it can be varied according to the wishes of the patient. When immersed his whole body is surrounded by a medium of practically uniform temperature, and is protected thereby from the discomfort of draughts of varying intensity. This is of much importance in a ward where windows are always kept open. A bath of 70° F. is at the same temperature whether the temperature of the ward be 45° or 90°. It is quite otherwise with sponging, even if the water used is the same, viz., 70° F. With a low ward temperature a general sponging is intensely uncomfortable; that part of the patient's body which is in contact with the macintosh rapidly becomes warm; elsewhere it is not so; evaporation plays the important role, and is practically uncontrollable. Its rapidity varies over the surface of the body, not only with the strength of local draughts, but with the temperature and dryness of the air. Hence the effect of a general sponging is irregular in the extreme, and always impossible to foresee.

With a bath evaporation plays no part; conduction only is concerned; this is uniform over the whole surface of the body; and the result upon the patient's temperature can be gauged with comparative ease.

One speaker at the discussion suggested that cold bathing might be suitable to the Queensland climate, but unsuitable to the colder parts of the colonies in the South. Had he applied this climatic argument to the practice of sponging, it would have had some force; it has none as regards the bath.

The relative advantages of cold and tepid baths were also referred to. One speaker expressed himself in favour of tepid bathing, basing his preference on the grounds that baths of lower temperature caused a greater increase in the production of heat, as evidenced by the increased excretion of carbonic acid and nitrogen. I do not wish to detract from the value of carefully constructed theories in the advancement of therapeutics, but I do maintain that until such theories are *complete* they should occupy a position secondary to clinical observation. The long uphill struggle of Brand's treatment has been due, more than anything else, to crude, ill-digested and unproved theorising. The contention that cold bathing increases the production of heat is only a half truth, and the less important half at that. "Cold increases the excretion of carbonic acid and nitrogen, only so long as the temperature of the body and tissues is not reduced. An actual reduction of blood and tissue temperature *lowers* the excretion of carbonic acid and nitrogen" (Winternitz). The main immediate object of cold bathing is to reduce the temperature of the blood and tissues generally, and in proportion as this result is attained, so is the success of the treatment. There is no question that, other things being equal, a bath of a lower temperature will reduce fever heat more rapidly than one of a higher, and that consequently, although the initial increase of heat-production may be greater, yet its final and *total* decrease is considerably more.

It may be admitted, however, that in the majority of cases of typhoid fever tepid baths are sufficient. In these the febrile heat is easily reduced, and it is usually a matter of indifference whether the reduction is effected by short cold baths, or by more prolonged immersion in tepid water. The patient's feelings may be, and frequently are, consulted on the matter, and it may be remarked incidentally that many have not infrequently preferred the shorter ordeal.

But none of this applies to cases of intense pyrexia. It cannot be too frequently repeated that the main indication of the cold-bath treatment is to "apportion the degree of refrigeration to the intensity of the pyrexia." ("The Cold-bath Treatment of Typhoid Fever," page 147.) The term intensity of the pyrexia does not refer to the mere height of the temperature, many merely high temperatures are easily reduced; but it applies to the stability of the temperature, to the resistance it offers to reduction by external refrigeration. Even Osler seems to have failed to fully grasp this point. In one of the reports of the John Hopkins Hospital he gives the chart of a case of intense pyrexia, and contents himself with remarking that the baths—of ordinary temperature and duration—failed to reduce the temperature, and the patient died from the pyrexia. Such a case I should have subjected to repeated baths of gradually lowered temperature and prolonged duration, until the refrigeration *succeeded* in overcoming the resistance of the pyrexia. I have remarked elsewhere "it is very fortunate that these cases which so urgently demand, and so greatly benefit by severe refrigerative measures, are those which pre-eminently support them well. Great obstinacy of the temperature, though possibly not directly due to, is almost always associated with a satisfactory state of the heart and circulation generally; and therefore no hesitation need be felt in pushing the antipyresis with vigour." Such patients have frequently been bathed every two hours night and day, in water of a temperature of 60° F. and even 57° F., the baths lasting thirty, forty-five, and even sixty minutes, without the slightest indication of danger arising.

Those who limit themselves to tepid baths, or even to cold baths of short duration, will, if they believe in the necessity of reducing temperature at all, be inevitably driven to the frequent use of chemical antipyretics.

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A CASE OF RUPTURE OF THE KIDNEY.

BY H. CRITCHLEY HINDER, M.B., CH.M.
(SYDNEY), HON. SURGEON TO PRINCE
ALFRED HOSPITAL, SYDNEY, ASHFIELD,
N. S. W.

CASES of this kind are somewhat rare. Morris, in a series of 267 cases of operations on the kidney records only two due to injury. In his work of 1885, there are twelve cases mentioned, though there is no mention of the death percentage. By far the most complete series is that of Edler, who collected 152. These included seventy-one reported somewhat earlier by Maas. Ninety of these were subcutaneous injuries, the remainder were associated with an external wound. The percentage of deaths in these subcutaneous cases was high. Out of ninety, forty-five died. Maas states that in children the death rate is still higher, for, out of seven cases, six died. Hæmorrhage was responsible for the death of many. Hæmaturia did not always occur at once, but sometimes days after the injury, the delay being probably due to a clot in the ureter.

Subcutaneous rupture has usually been caused by a fall from a height or some severe blow. The somewhat firm and solid kidney being but poorly protected from the force of a rapid blow by the comparatively feeble resistance offered by the intervening structures. A broken rib will sometimes penetrate the kidney. Morris states that a sudden bend of the body may rupture the organ, though he quotes no decided instance. Hæmaturia was present in seventy-five per cent. of Edler's cases. Collapse more or less was always present, and there was frequently intense, dull, sickening pain with at times colicky pain down the corresponding ureter.

The treatments that have been recommended and adopted are many. If the hæmaturia be slight and general symptoms not severe, no doubt rest in bed with a milk diet will probably succeed. Medicinally, ergot and astringents, if one has sufficient faith in them, may be tried as well in mild cases. If the hæmaturia be profuse, the patient will (and I say this from experience of many hæmaturias from various causes) probably pass the blood himself and suffer in no way from the retention of clots in the bladder, which will gradually break up and be evacuated. I have, on more than one occasion, with the cystoscope seen small clots which had lain in the bladder at least ten days since the hæmaturia had occurred, without giving rise to any cystitis.

If the patient has no retention of urine, no marked bladder symptoms, it is wisest to leave the clots alone. If any blockage occur, Fenwick recommends the passage of a silver catheter or a lithotrite to break up the clots, and then if necessary evacuate with a lithotrity evacuator. If this be done, the greatest care must be taken to ensure perfect asepsis. In any case, on the slightest suspicion of cystitis a perineal cystotomy should be resorted to and free drainage with frequent washing out, employing at least once a day a solution of one grain of silver nitrate to the ounce of water. Several cases have been lost owing to cystitis spreading up to the damaged kidney and giving rise to suppurative nephritis and perinephritis. In cases where there were swelling and dulness in the flank, giving evidence of extravasation of blood or urine, or both, various treatments have been adopted. The treatment by what is known as "watching the case" has at times met with success, but the most dire diseases at times marvellously disappear without assistance. In many others the same masterly inactivity has been attended with disastrous results; blood clot has broken down and abscess has formed or cystitis has been induced, usually by the use of a septic catheter, and this cystitis rapidly spreads and gives rise to suppurative nephritis and perinephritis, resulting perhaps in the death of the patient. Another method of treatment is that of puncture of the loin in order to get rid of the blood and urine. This has in almost every case been followed by suppuration, necessitating a free incision and more thorough treatment of the injured organ. Morris recommends the 3i doses of ergot and the application of Leiter's coil and ice to the loin. This is rather a pity, because ergot is only likely to increase the blood pressure in a vessel of any magnitude, and the application of external cold would hardly give the patient a very cold kidney, and the worst of it is that a feeble-minded procrastinator might act on such weighty authority and waste valuable time in a case where Morris himself would probably operate at once. It appears to me that if the hæmorrhage into the bladder be profuse, the kidney should be cut down upon without delay and the bleeding spot dealt with. If there be swelling and dulness in the loin, indicating the presence of something foreign to the part, incision should be made promptly and the blood or urine removed, the cavity packed with gauze in order to absorb as much fluid as possible and removed in a couple of days. The recuperative power of the kidney is so great that it should

on no account be removed while there is a shadow of a hope of it being patched up. The extravasated urine is probably aseptic, so that the operation should be conducted with every precaution if a good result is to be secured.

The following is a history of the case which was recently under my care:—

The patient was a boy of 12 years of age. He was walking along the top of a fence seven feet high, and, overbalancing, tried to jump on to a low galvanized iron shed three feet from the ground. He fell short and struck the edge with his right flank, and then fell, striking the back of his head rather forcibly on the ground. His mother saw him walk into the house doubled up, very pale, and in great pain.

I saw him two hours afterwards. He was lying in bed, flat on his back. He was a little restless, and slight movement gave him great pain. He did not answer questions readily, and seemed a trifle dazed. He had vomited three times, merely food stuff. His pulse was 100, small in volume and weak; temperature, 98°. There was no abrasion of the skin, slight bulging of the right flank, tenderness on pressure, and marked rigidity of the abdominal wall. On percussion there was slight dulness just outside the right rectus, increasing round towards the back. I gave no opiate, but left him with a placebo and called again in two hours' time. He had in the meantime passed about ten ounces of pure blood, and shortly after this some clear urine. His pulse was about the same rate, but double the volume. I concluded that his ureter was plugged by clot, and that hæmorrhage had ceased for the time.

He was taken a short distance to a nurse's home. He slept fairly well that night, passed pure blood twice, and bloody urine once a little later on, and in the morning his temperature was 99° and his pulse 86. His pain was increasing and he grunted in his breathing, was restless, and complained of fulness and a bursting feeling in his side.

He was prepared for operation. I cut down on his right kidney, finding his abdominal muscles darkly stained and somewhat cedematous and beneath them a cavity containing about six ounces of blood and urine. The lower two-fifths of the kidney was crushed, and presented numerous irregular lacerations causing pieces of kidney to hang loose. These pieces were removed, and the mass subjected to manual pressure for a short time. As hæmorrhage was now very slight, a mere ooze, in fact, I wrapped up the lacerated part in a strip of sterilised gauze which also somewhat loosely

filled the cavity, and the wound was sutured. That night the temperature was 99·6° and pulse 112. He spent a restless night, and passed a long worm-like clot, evidently a cast of his ureter, and after that only smoky urine. Urine and a little blood oozed into the dressing.

The gauze was removed on the third day. On the fourth day the temperature rose to 99·6°. A fine tube was passed up the gauze track and two ounces of urine escaped. After this, urine oozed away for about a week. The tube was removed, and within a fortnight the wound had completely closed and his urine was perfectly clear.

The diagnosis was simple, and early incision the most rational method of treatment. Nephrectomy is recommended, but unless the kidney is hopelessly ruined is to be greatly condemned. The condition of affairs discovered in this case and the ultimate result both tend to show that the method of treatment by early incision is a good one. Had the first rush of hæmorrhage been markedly severe and continuous, I should not have delayed but should have operated at once.

RUPTURE OF THE LIVER—ACUTE PYÆMIA—CEREBRO-SPINAL MENINGITIS.

By JOHN MACPHERSON, M.A., B.Sc., M.B.,
CH.M. SYD., GLEN INNES, N.S.W.

RUPTURE OF THE LIVER.

GEORGE E., aged 19, was run over by a dray on the afternoon of September 23rd. Profoundly collapsed, he was conveyed to the Glen Innes Hospital. Examination disclosed a large abrasion extending downwards and forwards upon the lower right chest over the area of the liver. There was great pain in the right hypochondrium. No fracture could be detected of the ribs. The abdomen was slightly distended and very tense. Urine was passed naturally; it was loaded with urates, but contained no blood. Temperature subnormal.

September 24th.—Abdominal distension increasing. Mucous vomiting. Diarrhoea—motions liquid, brown, and very foul; no blood. No abnormal dulness in abdomen. Skin pallid and cold. Pulse feeble. Very restless. Although on large doses of opium, the pain seemed in no way diminished. Temperature subnormal.

September 25th.—Pallor and restlessness increasing. Pulse very small. Lies chiefly on the left side, and now left abdomen quite dull

with faintly marked fluid thrill. Breathing quick and shallow. Diminished percussion resonance in lower right chest, with friction sounds in the infra-axillary region. Diarrhoea almost constant. Abdominal distension greater. Vomiting persistent. No jaundice.

September 26th.—Died at 12.30 a.m., wildly delirious. After death the blood poured in torrents from the nose. On making an autopsy I found an irregular rupture of the antero-superior aspect of the right lobe of the liver, about four inches in length; the peritoneal investment being likewise torn. The gall-bladder was intact. The abdomen was full of blood. The intestines were coated with plastic lymph, and bile-stained. The stomach and intestines were uninjured. The stomach contained mucus, but no blood. A slight contusion was noticed at the lower end of the capsule of the right kidney. There was a small amount of serous fluid in the right pleural sac. The lower lobe of each lung was congested, more particularly that of the right lung, which was highly engorged and oedematous. Numerous subpleural ecchymoses were scattered over the lateral aspect of the lower lobe, and fibrinous adhesions at one place. No ribs were fractured. The left ventricle of the heart contained soft pale fibrinous clot extending into the aorta. For the extraordinary epistaxis I can offer no explanation.

ACUTE PYÆMIA.

Miss H., aged 22, of excellent physique and in comfortable circumstances. When first seen on July 3rd, I obtained the following account of her illness. For some days she had a suppurating sore on the back of the terminal phalanx of the left thumb. She attended a dance on June 28th, and in order to prevent the glove from sticking to her thumb, had covered the latter with piece of plaster or stamp paper. Two days later had a headache, which disappeared on the following day, but again, on the day succeeding, she felt really ill, with pains all over and headache—chiefly frontal, feeling of stuffiness in the throat, unpleasant taste in mouth, appetite lost, vomiting; abdomen distended and tender, but not actually painful. No epistaxis, no shiverings or sweatings, no cough. As regards family history, her sister had rheumatic fever, but died later from a growth in the stomach.

Examination disclosed a small sub-epidermal collection of pus on the back of the terminal phalanx of the left thumb and an unhealthy scratch on the left forearm; tenderness and redness over the terminal phalanx of the right index;

a livid discoloured patch on the outer aspect of the left thigh in its upper third—very tender on pressure; a pemphigus-like eruption about both ankles; throat healthy—no enlarged glands to be felt in the sub-maxillary triangles; heart clear; pulse, 120; temperature, 104.6° F.; nothing abnormal detected in the lungs; tongue thickly white coated. Ordered quinine and hydrobromic acid mixture, with local treatment, for the offending thumb.

July 4th, 10 a.m.—Had passed a sleepless night; face palid, very anxious; no perspirations; terminal joints of all the fingers of the right hand red and acutely painful; no abdominal pain; bowels opened, motions dark; urine dark; temperature, 105.6° F.; pulse, 142.

5 p.m.—Bowels loose, motions fluid; very tender livid spots on the soles of the feet, at the bases of the toes; pulse, 144; temperature, 105° F.; transient erythema over inner aspect of right knee.

8.30 p.m.—Bowels, loose; pulse, 140; temperature, 104.5; scarlatiniform erythema upon upper front chest; red spots on the soles of the feet; heart, clear. The wound upon the thumb by this time was perfectly dry; the tongue was still moist, and had two thick bands of white fur along the dorsum. Ordered perchloride of iron, potassium chlorate and carbolic acid mixture.

July 5th, 10 a.m.—Temperature, 101.5° F.; pulse, 190, very feeble; respirations, 52; tongue thickly caked with white fur; lips and teeth covered with sordes; comatose, but conscious of pain; diarrhoea replaced by constipation; number of red spots on the soles increasing; pustules with hyperæmic areolæ over the tibiae.

3 p.m.—Coma deepening; no jaundice; no pyæmic odour; emaciation not marked.

3.45 p.m.—Died.

In this case it was by no means easy at the outset to definitely exclude acute rheumatism, suggested by the family record and the involvement of the joints of the right fingers. Moreover, the erythematous eruption was quite compatible with rheumatism, and the integumentary lesions on the soles of the feet were suggestive of peliosis rheumatica. The absence of any sweating whatever is certainly against rheumatism, and the joint affections were permanent, not transitory; furthermore, they were but subordinate manifestations of the violent dyscrasia.

CEREBROSPINAL MENINGITIS.

George B., aged 7, seen September 30th. Had been perfectly well until five days previously, when he was gathering potatoes

with his father. On that afternoon he became out of sorts and his appetite failed him. The following day severe vomiting supervened, soon followed by delirium.

The father was a hard-working bushman, but in his occasional fits of inebriety became wildly delirious. The patient was the youngest but one of a family of ten, living; an elder sister being markedly deficient mentally. One child died in infancy from a "cold," and there had been a still-born child. The patient himself had whooping-cough about two months previously.

When seen, the boy was deeply cyanosed, perfectly unconscious, tossing himself restlessly about, and occasionally screaming. The head was thrown backwards, but was not held rigid. Kernig's sign was well marked, but otherwise there was no rigidity anywhere; nor was there any evident paralysis of the limbs. The knee-jerks and plantar reflex were absent. No ankle clonus. The skin was apparently anaesthetic. There was no ptosis or strabismus. Left pupil much larger than the right; both were dilated, and although continually varying in size irrespective of light, they contracted well under the influence of strong sunlight, while a match held close up evoked but a feeble response. The eyes were restlessly wandering from side to side. There was an abrasion of the right cornea at its outer margin, with a band of neighbouring vascularity.

Tache cérébrale was not well marked; labial herpes absent; but purpuric spots were scattered over the trunk and limbs. There were no joint affections manifest. Otoscopic examination revealed nothing. The breathing was rapid and laboured, but the chest upon auscultation was clear. The heart-beats were rapid, frequent, and regular; no bruit. Pulse imperceptible. Abdomen retracted; spleen not palpable. Tongue absolutely dry and brown. Profuse, effortless, bilious vomiting. Incontinence of urine and faeces, the latter being liquid and dark brown. Extremities very cold, while the axillæ felt warm, and the temperature ran high. The variations in temperature were remarkable. At 1 p.m., 107° F.; at 2 p.m., 97°; at 4 p.m., 104°; at 5 p.m., 102°. Shortly before 6 o'clock the thermometer registered 103°, and about 6 p.m. he died.

No autopsy was permitted, but an exploratory needle inserted into the spinal canal, the cranial cavity, and the middle ears, gave negative results. *Post-mortem* lividity was very extensive.

I diagnosed the case as cerebro-spinal meningitis, placing considerable reliance upon the

presence of Kernig's sign, for neither hyperæsthesia nor muscular spasm were obvious. The effortless vomiting, incontinence of urine and faeces, the condition of the pupils, certainly pointed to cerebral mischief. Insolation was out of the question, and there had not been any history of ear trouble. In this case a purpuric eruption was pronounced—a feature which is held to be of some value in distinguishing cerebro-spinal fever from tubercular and suppurative (simple) meningitis.

NOTES OF CASES.

By P. CLENNELL FENWICK, M.B. LOND., ETC.,
SURGEON TO THE CHRISTCHURCH HOSPITAL,
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I. CASE OF SUPPRESSION OF URINE.

H. M., aged 56, was seen by me in consultation with Dr. Brittin, who gave me the following notes. The patient has been ailing for some months, and has had occasional attacks of severe abdominal pain. He was suddenly seized with entire suppression of urine, which lasted five days and a few hours. His present condition is as follows:—

The abdomen is very distended, tympanitic all over, even in the flanks, the umbilicus is protruded and exceedingly hard, it is of a dark purple colour, and at first sight looked like a new growth. The bladder is empty. Cystoscopy showed that the bladder walls were normal. The left urethral orifice was apparently blocked with a greyish plug of mucus. The right orifice was closed with a flame-shaped clot of blood. On the base of the bladder behind the trigone a dark patch was seen about the size of half-a-crown. The diagnosis was that of carcinoma of the kidneys, one of which was probably destroyed, and the ureter of the other probably blocked temporarily.

Patient consented to operation, but just before the operation was decided on he passed a few ounces of urine, and interference was postponed. During the next forty-eight hours he passed sixty-two ounces, but the third day he passed only three ounces, and the abdomen was accordingly opened. The peritoneal cavity was full of milky fluid, which escaped in large quantities. The intestines were empty and normal. The mesentery was converted into a hard mass of new growth, which completely hid the left kidney. The right kidney was soft, except at the pelvic edge, and the ureter could be felt as a hard cord. The abdomen was closed, as there appeared no chance of relieving the patient by any operative interference. The

next twenty-four hours the patient passed 169 ounces of clear urine. For the next seven days he passed an average quantity of 100 ounces, the urine then rapidly decreased, and he died eleven days after operation.

The necropsy showed that the left kidney was imbedded in a mass of growth which was continuous with the mesenteric mass, the ureter was occluded, and apparently this had been for some time inoperative. The right kidney was healthy, except at its edge. In the pelvis of this kidney a hard carcinomatous deposit was demonstrated which involved the upper end of the ureter. At the consultation the curious appearance of the umbilicus had been suggested as due to blockage of a persistent umbilical vein, and this was clearly seen to be true at the *post-mortem*. A large vein full of recent clot was traced from the umbilicus up to the falciform ligament of the liver, an interesting demonstration which I had never before witnessed.

II. PROSTATIC ABSCESS OPENING THROUGH PERINEUM.

D. M., aged 68, was admitted for sudden retention of urine. A catheter was passed with some difficulty, and caused much pain. On examination the urethra was seen to be pale, but fairly healthy. The deep urethra was inflamed, and there was fluctuation in the perineum. Perineal section was performed, and an abscess was at once opened. Fourteen ounces of foul pus were evacuated, and on passing the finger into the wound the abscess cavity was found to extend up behind the bladder as far as the finger could reach, the prostate was hard, and apparently stripped of its capsule posteriorly. The prostatic abscess had burst externally to the urethra and burrowed up behind the bladder and downwards into the perineum. I thought this case interesting, as I have usually found that an abscess of the prostate discharged into the urethra. The urethra was not opened at the operation, as I believed the retention to be due to pressure of the pus on the undamaged canal. Patient passed water without the catheter, and is now well. I was surprised that considering the large size of the abscess the pus had not made its way into the rectum.

III. PERIURETHRAL ABSCESS WITH EXTRAVASATION.

W. M., aged 39, was admitted with retention and extravasation of urine. There was a tight stricture which proved impassable, so a perineal section was at once performed. The tissues being extremely oedematous the wound was a

very deep one, and it was at the depth of at least an inch that a large periurethral abscess was opened. The finger passed into the wound, passed along the urethra as far as the limits of the scrotum. The scrotal tissues were almost destroyed, the whole scrotum being converted into an abscess cavity. Patient now passes a good amount per urethram, but the canal is still blocked by several tight strictures.

Urethroscopy showed the anterior portion of the urethra to be fairly healthy, but on passing the smallest cannula through the first stricture the canal showed signs of intense inflammation.

SOME NOTES ON TUBERCULOSIS AND ITS TREATMENT IN AUSTRALIA.

By W. H. O'NEILL, M.B., C.M. EDIN., TURRAMURRA, N.S.W.

IN bringing these notes before you, I do not propose to advance anything particularly new, but rather to bring under criticism our treatment of tuberculosis in Australia.

I have been surprised in reading some of the articles that have recently been written on this subject to find some of the opinions expressed therein. This has struck me most particularly in the question of treatment, both climatic and drug; and many of the results quoted have been totally at variance with my own experience. Such being the case, I have been led to compile these notes, and trust that the discussion of them will lead to expressions of opinion that will be useful to us all.

In dealing with the subject I shall first of all consider the climatic and afterwards the drug treatment.

The climate which is now, I believe, generally considered to be most suitable for tuberculous patients is one that is dry, bracing, and cool or cold, altitude not being such an important consideration. But in addition to the above conditions, the air should be a clear one, and not laden with dust.

Another point of considerable importance is that the daily rise and fall of temperature should not be great. Now, knowing what we require, it should be a fairly easy matter for us to fix on suitable localities to which to send our consumptive patients; but I am afraid it is not so easy as it would appear, and when I think of some of the patients that I have met in certain portions of this colony, I cannot believe that the medical men who sent them there had any conception of the true nature of the climates to which they were sending them. Certainly we can always obtain, by applying to the proper

authorities, the annual returns of the temperature, rainfall and humidity of various places. But are these returns reliable? In many cases they are not. How are they taken? In many places they are taken by the police, postmasters, or other Government officials, who know as much about such things as a bull does of quadratic equations. And yet it is on these returns that we have to depend for our information and guidance. It is recorded of one town that on a certain very hot day the local authority (who was a policeman) took the temperature, but before forwarding it to headquarters he compared notes with the stationmaster, whose thermometer gave a reading of several degrees difference; so they decided to consult a third individual who had a thermometer, but here again there was a difference of some degrees; so after consultation it was decided to average the three, and send that as the official return. The chances are it was as correct as any of them; but still it is a very unsatisfactory way for such things to be done, and until a better system is introduced we will have no reliable data to go upon.

The first climate I propose to deal with is that of the Riverina. For many years it has been the custom of medical men to send phthisical patients to this district, and to recommend it as one of the most suitable, if not the most suitable in Australia. I have also seen patients who had been sent there by British practitioners, so evidently the fame of this district is not confined to the colonies; and the year before last it was proposed that a farm should be established there for the reception and treatment of these patients. Now is this district all that could be desired for the permanent residence of such cases? I am afraid it is very far from it. And should a home or farm be established there I am sure that it will soon be found it can only be used with satisfaction during the cooler portion of the year.

During the winter months I don't believe a finer climate could be found for these patients, but during the summer months I don't think it would be possible to find a worse one. In the winter the air is very clear and bracing, and patients can move about and take exercise; they eat well, their symptoms improve, and almost invariably gain considerably in weight. But once the summer sets in the tale is a very different one. The dust storms which visit that district are simply fearful, and have to be seen to be appreciated, lasting as they frequently do for days. The dust is very fine, and penetrates everything, and remains floating about in the air for hours after the wind has

gone down. I have gone into a house there at night, hours after the wind had subsided, and the whole place appeared to be in a fog owing to this fine dust which remained suspended in the air. Now this is not an exceptional occurrence, but a frequent one; and I am sure you will thoroughly appreciate what effect the breathing of such air would have on an individual whose lungs were diseased.

Then, again, the temperature is often so high that it is impossible for such patients to move out of doors; 110° is not an uncommon temperature there; and there have been records during the last few years of 118° . Also, you will sometimes find that for days the thermometer does not fall below 100° ; and the majority of the people sleep out of doors at night, it being impossible to sleep in. Occasionally after one of these high temperatures a very heavy fall will take place, and then the reaction is far worse than the continued high temperature. Now what effect does this summer weather have on phthisical patients? They first of all lose their appetites, and fail to take the necessary amount of food; they lose weight rapidly, in many instances again develop night sweats, and in many the cough becomes much worse, and the expectoration is increased. In fact, I have seen very few phthisical patients there who did not go off very seriously during the summer months. They very soon learn this for themselves, and those who can afford it always go away to some less trying district for those months. In considering a climate it is always well to consider the class of case that does best in that climate, and my experience of the Riverina has led me to believe that those patients with a tendency to hæmorrhage do best there; those that show no tendency to hæmorrhage do not seem to do so well during any part of the year. As to the best part of the Riverina, I think it is much of a muchness all over it, except, perhaps, that the farther West you go the more trying become the conditions.

What I believe to be the best climate in New South Wales, if not in Australia, for such patients, is the Orange district, and it is there that I have found the greatest number and variety of cases do well. It will suit most patients the whole year round; but even so discretion must be used as to the time of year they are sent there. It is very cold in the winter, and to send patients there during that season is apt to prove too much for them and to do them injury, as they feel the cold very severely. But if they are sent in the summer they will in most instances adapt themselves to

the climate, and live in it the whole year round very comfortably. The dust storms in this district are nothing like those of the Riverina either in severity, frequency, or duration. And again, even on their hottest days, the nights are always cool, and the patients get comfortable and refreshing sleeps, which is an all-important consideration to a class of sufferers who require so much rest as those in the clutches of consumption do. The highest temperatures of this district do not come near those of the Riverina, as they seldom get the thermometer above 90°. Of course these thermometer readings I am giving you are all true shade temperatures. Most of the patients who go there find that the expectoration improves and diminishes, the cough lessens, the night sweats disappear, and they gain in weight, and at the same time there is a corresponding improvement in the physical signs. Many who have gone there for a change have derived so much benefit that they have stayed on permanently.

Next to the Orange district, I believe the Armidale to be the most suitable, and many of the cases I have sent there of all classes have done remarkably well.

The southern line, between Picton and Moss Vale, is useful for a change during the spring and early summer months, but is not suitable for permanent residence.

The same may be said of portions of the Blue Mountains, especially about Springwood, which is also unsuitable for permanent residence.

Another climate which has been largely recommended is that of Bathurst, but there I think the atmosphere is too humid to be of benefit; or, at least, of the patients I have sent there none of them did well, but rather the greatest number of them lost ground, and had to leave.

Of the climate of the far west, viz., Bourke and Walgett, the same conditions exist that do in the Riverina, only they are intensified.

Now there are many patients to whom a complete change of climate is essential, but impossible, owing to business, financial or other reasons. Is there any climate in which we can recommend them to live, so that they may be within easy reach of the city, and yet derive some of the benefits of climatic treatment. I believe that the Milson's Point line, between Gordon and Hornsby Junction, is a most suitable one for patients so placed. The fogs which are so very prevalent about the city rarely reach so far as this. The climate is a cool and bracing one, and patients soon feel the benefit of it. There are many who have gone

to live in this district for chest troubles, and all those I have so far seen have benefited by it. Of course if they come backwards and forwards to the city they cannot expect to get the full benefit of the climate, and yet in spite of that drawback they appear to improve considerably. My experience of this district has only been of short duration, but so far I must say it is most encouraging for this class of case.

Too much attention and study cannot be given to the question of climate, especially at the present time, when such vigorous attempts are being made to collect money for and to build sanatoria out of the "Queen Victoria Consumptives' Fund." It is to be hoped that the responsible persons connected with this fund will consider very carefully, and take expert advice on the localities and climates in which these homes are to be built before commencing operations. If they do not do so it is to be feared that there will be great cause for regret at some future time.

To my mind such an undertaking should not be left to voluntary contributions at all, but should be a national affair, undertaken and governed by the State. And why? Because to carry out such ideas successfully and to cope with this widespread disease will be an undertaking of great magnitude, necessitating a very large initial outlay in buildings, fitting-up, etc., and the cost of working such institutions satisfactorily will be very great. As we all know, voluntary and charitable contributions come in very erratically, and the majority of our charitable institutions are in a chronic state of "hard-up-ness," and are always crying out that they are in debt and want more funds. And what will be the fate of these institutions once they are launched if their maintenance is to depend on voluntary contributions? Will they fare any better than the charities at present in existence? And if they do not, what must the results be? Either that the inmates must be deprived of the attendance and requisites which are essential to their condition, or that the institutions must be closed up as failures. To avoid the possibility of either such result I would suggest that pressure be brought to bear on the Government to take the matter up, and to make it a National affair; also that the trustees of the funds so far collected hand the money they have over to the Government to go towards the object for which they were collected. And that if they thought it desirable or necessary the Government should impose a special tax to be called the "Charities Tax," the income from which to be devoted to working these

institutions (and, if necessary, some of the other charities of the colony.) By the introduction of such a tax the burden of carrying on these institutions would be more evenly distributed; as their income would be definitely known, so their expenditure could be regulated; and, altogether, they would be worked in a much more satisfactory and businesslike manner, as they could then be under the direct supervision of expert officials, who would have to account to the Government for their actions.

I had written these suggestions before reading that able pamphlet of Mr. L. Bruck on "The Uses and Abuses of Public Hospitals." The suggestion that he makes for the carrying on of the public hospitals, viz., that the different districts should be taxed to carry on their individual hospitals, I consider an excellent one; but in regard to the consumptives' homes it is a different matter, as it is one affecting and benefitting the colony as a whole far more than the districts in which the homes happen to be located, so the colony as a whole should be taxed and bear the burden of it.

Another matter of great importance in reference to these homes is that there should be a proper classification of the patient, those cases in the incipient stages should not be put in the same dormitories or be allowed to mix with those in more advanced stages of the disease. Some time ago I visited and had opportunities of watching the manner and conduction of the Thirlmere Home, and I must confess that I was more than surprised and shocked. In the first place the building is one that is not at all suitable for the purposes for which it is used. It is composed of three stories, the communication from one floor to the other being by means of stairs, there being no lifts; so if a patient was unable to negotiate these stairs he would have to live on the balconies and ward of the floor on which he slept. Now, as outdoor exercise is an essential to these cases, you can well imagine that such an institution was not an unmixed blessing to those who were obliged to avail themselves of its charity. Also, there was absolutely no classification of the patients. I have seen cases of incipient phthisis there sleeping in the same wards with the most advanced cases having very copious and purulent expectoration. While speaking of expectoration, I must refer to the cuspidores with which the inmates were provided: they consisted of empty baking powder or like tins; there was no antiseptic sawdust or anything in them, but the owner simply expectorated into the bare tin. At the foot of the hill on

which this institution is built there is a dairy farm, the milk from which, I believe, is sent to the city. The inmates of the home used to wander about over the paddocks where the cows grazed and expectorate as they went. Of course they carried these tins with them, and were supposed to expectorate in them, but when they got out of sight of the home they did not take much trouble about the cuspidor. So the cows of that farm would have a fine chance of picking up tuberculous sputum on their daily grazing expeditions. What a number of unknown advantages we city people derive from our pure country milk supply! I merely quote these facts to show how absolutely essential it is that such institutions should be under the supervision and control of responsible experts, and not be left to the management of incompetent committees and to depend for their support on the vagaries of precarious charity.

So much for our climates. Now let us turn to our drugs. In an article in the June number of the *Australasian Medical Gazette* Dr. Martin quotes Gerhardt as saying that "The treatment of consumption with drugs has gone into utter bankruptcy." To criticise such a statement as that mildly, I should say that it was very strong, and it appears to me like the expression of opinion of one who was riding his own "hobby horse," which was for the time being "the open-air treatment." Unfortunately, some members of the medical profession are too apt to seize on every new idea that comes out or every new line of treatment, and to discard the old lines entirely; they do not always consider that the old lines or methods and the new combined may do a great deal more good than either separately, and "the open-air treatment" is the latest fashion. Now, I do not attempt to undervalue the benefits to be derived from the outdoor treatment of consumptives, for I have seen too much good result from it to criticise it adversely, but I certainly do say that cures are often hastened and made more satisfactory by the combining with it of a judicious course of medicinal treatment. And also that many patients who cannot avail themselves of the open-air treatment can be greatly improved and often cured by a medicinal and dietetic course. We certainly have no drug which is an absolute specific for phthisis, but we have some on which we can largely rely to do good work for us. And speaking of specifics, have we any drugs in the pharmacopoeia which are absolute specifics for any diseases? Do the salicylates cure every case of rheumatism we meet? And does mercury never fail in syphilis? But we do not consider the drug treatment of

syphilis and rheumatism bankrupt because they do not always give us the results we hoped for. Then why should we consider our drug treatment of phthisis bankrupt because it does not always cure? So long as they return us a fair dividend we should be loyal to them, and hope that improved methods of administration will increase that dividend till such time as an absolute specific is found.

In dealing with the drugs I shall take them separately, and give you my own experience with them.

Guaiacol (pure).—This preparation I have found gives me more uniformly satisfactory results than any I have used. In the majority of cases in which I have prescribed it I have found the cough lessen materially, the expectoration become less purulent and reduced in quantity, the night sweats lessen and disappear, the weight improve, and if diarrhoea existed it lessened or disappeared; at the same time the physical signs improved. To get the full benefit of it, it should be pushed and persisted in for a prolonged period. I usually commence my treatment with one drop dissolved in alcohol and given every four hours, and increase the dose by one drop about every week, until the dose reaches v. or vi. minims every four hours, and then I keep on that dose for a prolonged time. I have seldom found it necessary to push the dose beyond that; but in several instances I have increased it up to x. minims with most satisfactory results, and no unpleasant symptoms. In using the drug in this way I have only in one instance found unpleasant symptoms develop; this was the case of a young married woman who came to me in a very advanced stage of the disease, and just two months after her first confinement; I pushed the treatment rather too rapidly with her, as I departed from my usual custom, and increased the dose every third day instead of every week; when I had worked the dose up to ℥ v. every four hours she developed considerable nausea, giddiness, and sleeplessness, so I reduced the dose to ℥ ii., and worked it up more slowly, only increasing by ℥ i. every fortnight; this she tolerated well, and benefited very largely by. She increased in weight at the rate of three-quarters of a pound a fortnight, and is now doing well on the larger dose. Where unpleasant symptoms do develop I am fairly convinced it is due either to the use of too large a dose or to the too rapid pushing of the drug.

Creosote is also a very valuable aid to us in dealing with phthisis, either by internal administration or by inhalation. It is more apt

to cause gastric disturbance than guaiacol, but this can be kept largely in check by its method of administration. It is best given in milk or cod liver oil, starting with one drop and gradually working it up to six, or, if the patient will take it, up to ten. But I do not think it advisable to push it beyond that, as I think few will be met with who will tolerate larger doses with benefit.

Carbonate of guaiacol has not proved a very encouraging preparation in my hands. But where I have had good results from it were in those cases in which I rapidly pushed it up to the maximum dose. I usually start with gr. iii. thrice daily, and increased the dose by gr. ii. every four days until I reached the maximum dose of gr. xxx. But even in those cases where I found it do good I found that the guaiacol pure did more good. Another disadvantage of the carbonate is its cost, and patients frequently complain of that, for people do not all nowadays value a thing by the price they have to pay for it.

Hypophosphites.—These, I believe, often do a certain amount of good, not so much from any direct action on the lung or the bacillus, but rather from their general tonic effect; and I have found them give the best results where there was considerable anæmia. I have also found that arsenic and chalybeates gave good results in similar cases, probably for the same reasons.

Intra-laryngeal injections of menthol I practised some years ago, but now have entirely abandoned for several reasons. In the first place they caused very great discomfort to the patients, and the results were not at all satisfactory, as the symptoms did not diminish and the patients did not increase in weight. Certainly, menthol may have an effect on the bacillus, but it is very difficult to say that the drug reaches the affected areas when injected through the larynx.

Quinine gives excellent results in checking fever, but it does not seem to have any beneficial effect beyond that.

Calcium chloride I have frequently used after I had reduced the urgent symptoms with some of the foregoing remedies, and it has seemed to be very beneficial in some of these cases. Whether it acts by causing or aiding calcification is hard to say, but in certain instances I have found a continuous and marked benefit result by pushing this drug.

Iodine.—The custom of painting the chest over the affected areas with one of the preparations of this drug I now seldom or never have recourse to, as I believe it puts the patient to

an amount of discomfort, if not actual pain, which is not warranted. I believe we can get all the benefits to be derived from it and more without any of the discomfort by the following method.

Inunction.—If an ointment, consisting of guaiacol 3 i., vaseline 3 ii., lanoline ad. 3 ii. is rubbed into the whole of the chest, both back and front, twice daily, for about twenty minutes at a time, it will be found that the pains in the chest are rapidly relieved, and soon disappear, and that the general treatment being prescribed is greatly aided by it. So far I have not met a case where this did not give considerable relief. Sometimes I increase the quantity of guaiacol to 3 iss., but for routine use I find the first prescription most satisfactory. It will also be found to relieve the pain of the patches of pleurisy which one so often meets with in cases of phthisis. While speaking of inunction, I will refer to another form which I have found useful where there was considerable emaciation, and that is the rubbing in of Dugong lard both over the chest and abdomen.

Cod Liver Oil.—Though this can hardly be classed as a drug, still one cannot speak of the treatment of phthisis without referring to it. It is of the greatest value in these cases, and should, I think, be prescribed in every case, without exception. My experience has been that one of the emulsions, or the extract of malt and oil is better borne by the majority of patients in this country than the crude oils, and there are few patients one meets with who will not tolerate and improve on it in one form or another.

Alcohol.—This group, I consider, should always be prescribed to phthisical patients with the greatest caution, for they seem to contract the habit so very easily, and it is very doubtful if it does any good, but, on the contrary, often does much harm. Of course there is the old idea that a rum and milk in the morning is very strengthening to patients. So it may be; but is it not rather from the milk the benefit comes than from the rum? Certainly one sometimes meets with a case that will assimilate its food better by the taking of a little spirit with it; but they are few and far between. And the wholesale prescribing of alcohol to tuberculous subjects I would discountenance. In many instances it tends to increase or cause sweats, and in a number of cases which have come under my care the sweating has stopped when I stopped the spirits.

A glass of red wine, such as Burgundy, or a good claret, at eleven in the morning, or in the morning and afternoon, I have found do good,

especially in anæmic phthisical women. Malt liquors are in most cases useful, and a glass of stout or ale once or twice in the day is often of great benefit.

Tuberculin.—The last of the methods of treatment which I propose to bring before you is that much-abused and now almost entirely discarded preparation, Koch's Tuberculin. Some few years ago, when it was first discovered, everybody looked to it as an absolute cure for this dread malady; and when it did not come up to the expectations which were held for it, it was dropped and relegated to the limbo of absolute failures. Now, if it is not an absolute and unfailing cure, is it not possible that it may be an aid to us combined with other treatment? This I hold it is, and a very valuable aid also. It is not suitable to every case of phthisis we meet with, but it is suitable to a great many of them, and, if used with sufficient care, will give results which will certainly reward one for the trouble taken. My own experience with this preparation has led me to the conclusion that it produces the best results in cases of incipient phthisis; but I have also had good results with it in more advanced cases. The presence of cavities is held by some to be a bar to its use, but I have used it in cases where cavities had formed, and then had good results. In one case I had there were three cavities of considerable size which could be distinctly mapped out. This patient had been under a prolonged course, guaiacol carb., guaiacol pure, creosote, cod-liver oil, etc., extending over some two years. There had been improvement up to a certain point, but no further. The cough was racking, the expectoration muco-purulent, with occasional traces of blood, night sweats, etc. I commenced a course of tuberculin, with the result that, before a dozen injections had been given there was a marked improvement; the cough became less troublesome, the expectoration less purulent and reduced in quantity; the night sweats disappeared the appetite improved, and there was a considerable gain in weight. Of course, the guaiacol internally and guaiacol inunction were kept up at the same time. This patient was kept on tuberculin off and on for some two years, and is now, I believe, thoroughly cured; at all events, she has had no active treatment during the last six months, and has shown no signs of active trouble during that time. This case is only one out of a number I could quote in which the most satisfactory results have taken place. But the greatest difficulty I have had to contend with was to keep these patients up to the

mark in continuing treatment, for as soon as they feel themselves a little better they get careless and neglect their remedies, and so let themselves slip back again; and then one has one's work all over again to try and get them back to the point of improvement.

Now what are the conditions that should be an absolute bar to its use? I do not think it should be used where there is extensive cavity formation affecting both lungs; but I should not consider a moderate-sized cavity in each lung a bar to its use unless there was extensive consolidation accompanying it. My usual method of deciding whether a case is likely to do well on it or not is to give a small experimental dose, and to judge by the reaction what my future line of treatment shall be. If the temperature does not rise above 100° within two hours, and if there is no marked nervous disturbance, then I continue the injections; but if it does rise above 100° , then I either reduce the dose or discard the treatment altogether; if it rises to 101° , then I reduce the dose; but if it rises to 102° , then I discard it. The dose I usually commence with is .001 c.m. in a $\frac{1}{4}$ per cent. solution of carbolic acid in distilled water. I give 1 c.m. of this solution as the initial dose, and increase it by 1 c.m. every second day, until I reach the maximum dose I use, viz.: 10 c.m. of a 1 per cent. solution of tuberculin in one-half per cent. solution of carbolic acid in distilled water. The needle and syringe are always thoroughly sterilised and kept in absolute alcohol; and the skin is thoroughly washed, and has carbolic solution and also turpentine rubbed into it before each injection. From one to two hours after each injection I take the temperature, and if I find that satisfactory, then I increase the dose at the next injection, which is on the second day following; but if the reaction is excessive, then I reduce the dose proportionately, and gradually work it up again. So far in using this preparation I have had no unsatisfactory results, but, on the contrary, many most gratifying ones, and I think that, if medical men would give this preparation a trial in the manner suggested, they would have no cause to regret it.

I might say that once I get patients up to the maximum dose I allow them to give the injections themselves, and get them to take the temperature afterwards; it does not necessitate such constant visits; and if they notice any abnormal rise of temperature they come to see me.

In conclusion, I can only repeat what I have already said, viz., that though the open-air treatment of phthisical patients is an excellent

one, and one for which I have the greatest respect, still it is not the only means of relief or cure we have within our reach, and I for one deny that the drug treatment of tuberculosis is bankrupt.

(For discussion on this paper see page 506.)

SURGICAL TUBERCULOSIS IN OLD AGE

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TUBERCULOSIS so frequently attacks youth that it seems to be a fairly general impression that old age is almost exempt from this affection. It is no doubt rarer in old age than in youth, probably because those who are susceptible are apt to be attacked with tubercular disease in fatal form before middle life is passed. The omnipresent tubercle bacillus may, however, find a lodgment in the tissues of the aged and not be repelled, causing the usual chronic inflammatory changes. Four cases of this kind have come under my own observation within a period of four months, showing that such occurrences cannot be so very rare. The cases illustrate the affection in different structures, bone and joint, gland and tongue. With regard to the case in the tongue, it would appear that tuberculosis of the tongue and mouth seldom attacks young people. Schliferowitch has collected all the recorded cases, and finds the most frequent age attacked was from 40 to 50. In the other three cases it will be noticed that radical treatment by amputation was adopted. In the aged less severe measures do not succeed so well as in youth. For the notes of the first three cases I am indebted to Dr. Loughnan, late Resident Surgeon at St. Vincent's Hospital.

I. TUBERCULAR DISEASE OF WRIST IN WOMAN OF 74.

Mrs. W., *et.* 74, widow, was admitted to St. Vincent's Hospital on July 28th, 1898, complaining of swelling, redness and pain about the right wrist. Fifteen years before she received an injury (kick from cow) to right wrist, and it has been swollen since. Twelve months after the injury it gradually became deformed. Has been able to use it a little until two months ago, when it became red, and burst and discharged matter, and got very painful. Has had similar attacks of pain and inflammation during last three years, more frequently latterly. No pain when joint not inflamed.

On Examination.—Hand turned strongly to ulna side; much swelling about wrist, extending completely round it and up flexor aspect.

Skin reddened and cedematous. Sinuses present discharging watery, cheesy matter and pus. Probing discovered carious and necrosed bones of carpus. Temperature, 100°; heart and lungs, normal; urine, normal.

On August 1st Mr. Syme amputated through lower third of fore arm. In making flaps a tubercular abscess was cut into in the subcutaneous tissues on flexor surface. The abscess was found to be cylindrical in shape, about four inches long and half an inch in diameter, extending well up to middle of fore arm. Its walls were dissected completely out. The wound healed by first intention in ten days. The bones of the carpus were all softened and cheesy with tubercular deposit containing small sequestra.

II. TUBERCULAR ABSCESS OF EPIDIDYMS IN MAN OF 70.

James M., *et.* over 70, gardener, admitted to St. Vincent's Hospital September 1st, 1898, complaining of pain in and swelling of right testicle. He states that he has had something growing on right testicle for the last twenty years, which was like a small pea at first, but has steadily grown larger, with very little pain. Two weeks ago it suddenly became very painful, and began to swell rapidly, followed in about a week by redness of the scrotum—the right side only. No shivering, but has felt very hot and thirsty, and vomited on night before admission. Bowels very costive. States that he has worn a truss for rupture on right side, which he has had for five years. Has had difficulty and increased frequency of micturition at night for the last eight years, and is in the habit of using a catheter. Temperature, 100° F.; pulse, 100; good force and volume, tension good; vessels thickened, and very tortuous; visible pulsation at elbows. Tongue, moist, furred. Respirations, 20. Right testicle very much enlarged, about the size of a large pear, covered with red cedematous scrotum; testicle feels firm, some fluctuation at upper part; tender. Induration and thickening of the cord up to the external abdominal ring, which is enlarged, a small hernia presenting at the ring. Lungs: Chest rounded, percussion resonant all over; vesicular murmur heard, but expiration prolonged. Heart sounds clear, but slightly distant. Abdomen soft, and moving freely with respiration. Soft rubber catheter, passed for retention, readily entered the bladder; no stricture. Inflammation and redness of scrotum diminished by fomentations and support.

On September 5th Mr. Syme, having examined the prostate, and found it markedly

enlarged, performed double orchectomy, and radical cure of hernia on right side by a modified Bassini's method. A tubercular abscess about the size of a hen's egg was found in the upper part of the epididymis; the tissues around the testicle were indurated, and the thickening extended up the spermatic cord into the inguinal canal. The vas deferens itself was not affected. The wounds healed, and patient was discharged on September 20th. The day following the operation he was able to pass water without a catheter. Subsequently a catheter was occasionally required.

III. TUBERCULAR DISEASE OF ANKLE.

Gustave L., *et.* 58, farmer, admitted to St. Vincent's Hospital May 29th, 1898, complaining of swelling and pain in right ankle and inability to walk. States that it has been swollen for the last two years, but that he has never had anything done for it. Never had any injury, and has had no other illness. The right ankle is very much swollen, the swelling extending down to the sole of the foot and nearly to the toes. The skin is reddened, and there is marked bulging inside behind the malleolus and outside beside the tendo achilles, but all outline of the joint is obliterated by the swelling. These prominent points are found to be fluctuant, and but slightly tender, and fluctuation can be made out from side to side of joint. The rest of the swelling is "pulpy." There is very little movement in the joint, with grating and little pain. Heart and lungs, normal; urine, healthy.

On May 30th, Mr. Syme opened the joint by three incisions, two on inner side, one on outer, through the fluctuant points, and removed a quantity of dead bone and tubercular granulation tissue.

On July 7th, the swelling having much diminished, but much carious bone being still present, the operation was repeated; and on July 25th, the condition being unimproved, amputation was performed through the lower third of the leg. Wound healed by first intention in a fortnight.

On dissecting the ankle, the ankle joint, and the medio-tarsal and calcaneo-astragoloid joints were found disorganised, the bones stripped of cartilage and surrounded by tubercular granulation tissue, which was also present about the tendons behind the inner malleolus, extending into the sole, but not up the limb.

TUBERCULAR TONGUE IN WOMAN OF 62.

Mrs. W., *et.* 62, attended as an out-patient at the Melbourne Hospital on September 11th, 1898, complaining of a sore on the tongue. It

had been present for about four months, and was increasing in size. The tongue was very coated; at the side of the tip was an ulcer the size of a shilling, circular, its base greyish and sloughy and irregular, its edges sloping, not elevated or undermined, the tissues round it thickened for some distance. No enlargement of glands in neck. She had a cough and expectoration, and the physical signs of consolidation with vomica at apex of left lung. A consultation was held, at which it was decided that the ulcer was tubercular, but, owing to the advanced disease in the lung, that nothing surgical should be done.

(For discussion on this paper see page 508.)

THERMO-THERAPEUTICS, OR SUPER-HEATED DRY AIR, BY THE METHOD KNOWN AS THE "TALLERMAN."

By S. SMITHSON DUNN, M.B., C.M., ADELAIDE, S.A.

THE first case so treated in Adelaide, S.A., was in the early part of April, 1899, by me, at my own residence, and since then *forty different patients* have undergone a course or more of this comparatively *new method* of treatment to *Australasia* at least. Although in London, England, I had considerable experience under the personal supervision of the inventor, Mr. Lewis A. Tallerman, at his own institution in Welbeck-street, and at his advice I brought out with me the genuine apparatus, etc. As it is my intention shortly to read before the South Australian Branch of the British Medical Association a paper going into the minutiae and detail of these cases treated here, I therefore in this article only purpose giving a brief summary of the result of my first forty cases or more, the treatment having been applied to a varied assortment of diseases, both medical and surgical. In a large majority it is of interest to notice that the effects were not only beneficial at the time, but the effect also appears permanent in some cases. The application of super-heated dry air by the use of a Tallerman cylinder is of course local, but the effect is distinctly constitutional, noticed especially in chronic gout, or chronic rheumatism, or chronic rheumatic arthritis, etc., etc. On first introducing a limb into the cylinder at say a temperature of 160° F., the limb being properly protected and covered, and the rest of the body and head, except the face, carefully covered by blankets, the patient for a time is excited, and the pulse rate is increased by a few beats, seldom more than a dozen. At the end of ten minutes

there is certainly a rise of the internal temperature (a degree at the most), but before *general diaphoresis* has been set up, both the heart and the internal temperature resume their normal condition, and the patient experiences a glowing sensation of warmth; and if *previously in pain*, say in a joint, experiences quite a *soothing* condition, which is so marked in some patients that it is with difficulty that they are kept from falling off to sleep during the process of the bath, *which lasts from 40 minutes to 1½ hours*, or even more. In cases of valvular disease of the heart, where also some form of chronic rheumatism also exists, I have particularly noticed, even after a temperature of 250° F. has been reached, that there was no marked bad influence upon the heart, in fact, after the bath is over, and the profuse diaphoresis ceased and the patient cool, he admits himself that there is not so much shortness of breath in heart affections, and on auscultation the heart is found to beat with a much stronger rhythm, and in *one case*, where a very loud mitral systolic bruit existed before the treatment it was decidedly deficient in its intensity and loudness one hour after the patient had cooled. As said before, *pain* is vanished during treatment, and another feature prominently observed, especially in diseases of recent origin, such as acute gout, acute synovitis, either rheumatic or traumatic, sprain or dislocation, where *before operation* there is distinct and prominent swelling of the particular joint affected, *is considerably reduced*. After the patient's limb is taken out of the cylinder it is quite common to notice a difference of half an inch to three-quarters of an inch, obtained by measuring before and after the operation. Another feature which I observed purposely in a few cases, to determine whether the body weight was decreased by the action of high temperatures on the skin of the limb, confined in so narrow a space in such dry heat, two patients were weighed before and after the operation with clothes on, and there existed an increase of nearly a pound before the bath; in a *third*, a very corpulent patient 1½ lbs. was lost during the bath by water from the very excessive perspiration; these three patients were kept with a limb in the Tallerman cylinder, each for forty minutes, the temperature 248° F. in the three cases. It is no doubt that *scorching of the skin is prevented*, and the high temperature bearable on account of the rapid and copious general diaphoresis that occurs in all cases treated (except in one of cerebral hemiplegia), which, as the water evaporates from the cutaneous surfaces into the surrounding air, lowers the

temperature of the skin surface, and thus neutralises the external heat. During the bath there should not be any sensation of burning, as the instrument is perfect; when it occurs it is often due to improper covering of the limb, or the raising of the heat too rapidly; this is easily and immediately altered by opening the top valves and the end of the cylinder for a few moments, and spreading a piece of lint over the affected part. On the removal of a limb from cylinder there is a faint crimson blush observed, and the fingers or toes give the true characteristic signs of the washerwoman's hand, and as a result of the treatment the joints that have undergone the treatment, that *were before* operation stiff and immovable, painful and swollen, *become soft and pliable* (oft-times the fibrous adhesions are broken down with gentle force), *painless*, free in motion, either in extension or flexion, and the *swelling* considerably reduced, after forty to sixty minutes confinement in the hot-air cylinder. The summary of the many cases I have treated is as follows:—

CLASS I.

Gout in all its forms, with proper treatment medicinally and dietetically, the effect is marvellous, and I believe to be lasting, as it so greatly assists in the elimination of all acid and morbid poisonous products from the general system, and at the same time the "Tallerman Treatment" supplies good nutrition to the whole system, and increases the heart's action, and removes the inflammation from the diseased joint. Three cases so far treated successfully. The temperature of the cylinder not needed higher than 242° Fah.

CLASS II.

(Nine cases at present treated.)

Rheumatoid Arthritis, or Chronic Rheumatic Gout.—The most distressing and obstinate of all forms of joint disease. The "Tallerman" is most beneficial and pronounced while under the treatment; but unless the treatment is followed up persistently for some months I am sorry to admit the good effects first obtained are not lasting. A course of ten is not sufficient, sixty is more likely required. Patients tire, and the medical practitioner has the greatest difficulty in persuading him to persevere with the treatment. These cases are the most frequent, and are so often combined with osteo-arthritis, deformities of many joints, either with bony ankylosis or long-standing tough fibrous ankylosis of the joints, particularly the knee, ankle and shoulder joints. In *five of these cases* I may claim that the Tallerman Treatment proved of real benefit, but they all had a course

of fifteen baths. One case, a lady, aged 66 years, had twenty baths, and was greatly improved. She is going to take another course of ten baths.

CLASS III.

Gonorrhœal Rheumatism (one case), with great pain and deformity. An unfortunate cripple, unable to dress or undress himself; man, aged 35 years. Had two baths; *refused to have more*; obtained some slight relief. Here 280° F. temperature was reached. Copious perspirations; remained in cylinder each time for fifty minutes. Am of opinion a course of ten baths would have greatly benefited him.

CLASS IV.

Stiff Joints, accompanied with pain. Two cases, both result of previous and old injury, and with history of rheumatism in both these cases; benefited very much; in fact, one with stiff and painful knee-joint was discharged cured after three baths, temperature 250° F., for sixty minutes each time. The other, with stiff and painful ankle-joint, improved considerably after five baths, temperature 260° F., highest reached in this case; duration in cylinder, sixty-five to seventy minutes. In this class I might mention a case of spasmodic wry-neck; after ten baths, concluded treatment to be a failure.

CLASS V.

Sprains (one case). Ankle badly sprained by a fall; girl, 10 years; cured; one bath; temperature, 220° F.; time, fifty-five minutes. Swelling and pain removed; ankle afterwards put up "*à la* ambulance; thick layers of cotton wool, and 2½-inch wide bandage. Was seen again in a week; no pain; no swelling; ecchymosis only faint; walked with only a slight limp from weakness.

CLASS VI.

Sciatica (six cases).—*Four only received slight benefit* after ten baths. Two cured after five baths. Temperature in these two cases, from 248° to 272° Fah.; duration of each operation, sixty minutes. I certainly attribute the cure to the use of applications by means of brush of HCl. Fort. over course of sciatic nerve, then covering the whole limb with soft lint, fixing by bandage; then wrapping felt, cut to shape of leg, made in form of a casing; and afterwards enveloping lightly the limb in india-rubber sheeting; then placing in the cylinder, and keeping patient there for one hour in each bath, the temperature only in the first bath heated to 272° F., the others ranging from 248° to 255° F. It is a cruel treatment, but

effectual, and there was a nasty troublesome sore to heal afterwards from the use of the HCl.

CLASS VII.

Lumbago (three cases).—All improved wonderfully, and in only one of these cases were ten baths administered; the other two had four. In the former there existed a rheumatism generally for many years.

CLASS VIII.

Chronic Dislocations (one case, sub-coracoid, badly reduced).—Dislocation of shoulder-joint in man aged 30 years; practically irreducible before bath without using artificial force, such as the pulleys, etc. Arm (right) placed in cylinder up to shoulder; temperature of cylinder reached 286° F.; seventy minutes; when placed first in cylinder, temperature was 140° F.; a gradual, almost imperceptible, rise followed, and patient commenced to perspire at 238° F.; after seventy minutes the perspiration was rolling off his face and nose, and he complained that arm was very hot, and he felt giddy; was at once taken out, and the arm dried and gently massaged; and after some careful manipulation and gentle pulling the dislocation was reduced, causing him considerable pain at the time. *Recovery*: By the aid of the "Tallerman" the adhesions of the false joint were broken down.

CLASSES IX., X., AND XI.

Paralysis agitans, cerebral hemiplegia, and chorea (one case of each).—The "Tallerman" is useless. In the first, matters were made worse. In the second, after five baths, temperature of each 280° F.; right arm inserted; *no perspiration*, and, as far as patient's own conviction, *not any better*, though I believed at time that he walked better, and could pick up small objects with fingers freer and easier. In the third case, only one bath, temperature 240° F., no effect whatever; the spasmodic contractions of both sides of body, etc., not altered at all.

CLASS XII.

Hydrops articuli of knee-joint (one case).—Man, aged 45 years; a course of six baths; at first there seemed a great improvement; *unfortunately it did not last*. Other ordinary means were tried as well as the "Tallerman." Patient tired of treatment, and left off coming.

CLASS XIII.

All cases of *simple synovitis*, whether rheumatic, traumatic, or tubercular, the "Tallerman" super-heated dry air gives excellent results after a course of at least ten baths.

CLASS XIV.

Eczema, specially the dry form, two cases,

both women; entirely removed, after a course of ten baths. Temperature average, 245° F.

CLASS XV.

Psoriasis (one case of syphilitic type).—Three baths. Temperature, 260° F.; and with 10 gr. pot. iod. in the latter, ter in die, removed the psoriasis, which returned in one month's time. When two more baths were administered, plus the internal administration of *thyroid tabloids* i. ter in die, for a fortnight.—*Recovery*.

CLASS XVI.

Varicose Veins (two cases).—Women, both during their menopause. Ten baths, highest temperature reached 240° F., and mag. sulph. and ferri. ammon. cit. internally administered. Duration of bath, forty minutes. Both these cases were greatly improved.

CLASS XVII.

Bronchial Asthma (one case).—Cured in two baths, combined also with medicinal treatment. Lady, aged 38 years, with temperature 103°, breathing embarrassed and gasping; hyper-resonant chest, sibilant and moist râles all over chest; pulse, 120. Right heart dilated a little; heart weak in action. Had asthma for two or three years. Administered two baths within sixteen hours. First one temperature reached 200° F., was unable to stand it higher; breathing became very urgent; was poulticed for three times with crushed linseed and mustard. Eight hours afterwards put her in cylinder, at least her *right arm to shoulder*. Temperature reached in this case 242° F.; after forty-five minutes was taken out, *free perspiration*, loose cough, and a lot of thick white expectoration like sago granules inspissated freely with frothy mucous; put back to bed; next day patient out shopping, and the after history there has been no further attack.

CLASS XVIII.

Influenza (three cases of the catarrhal form).—Disease cut short after one bath. Temperature 230° F. Sixty minutes.

CONCLUDING REMARKS.

In any case of diseased bone this "super-heated air" treatment is valueless; the same can be said in false joints from an ununited fracture, except it occur at a joint, when the treatment will loosen the adhesions, and the limb may be put up in a better position, which would favour a better reunion, after friction of the ends of the bones have been done.

Tallerman Treatment is no good for epilepsy, chorea or hemi-chorea, or rickets.

For sciatica the "Tallerman" alone does not give good results, unless the cylinder is made

or adjusted so that the patient can sit over one end of it on some india-rubber sheeting. The "Tallerman," after the course of the sciatic nerve has been painted lightly with HCl or HNO₃, and then the whole limb covered with two or three layers of lint, and lightly fixed with a bandage, then wrapped in a felt legging to come up as far as hip joint, and over that wrap a light piece of india-rubber sheeting. By this method I have cured two cases, though certainly they suffer sharply while the heat is being applied, and there should at least be a week before the treatment is renewed. Four such baths should remove even the very obstinate and chronic forms.

In muscular rheumatism of back (lumbago) the Tallerman Treatment is always beneficial if ol. terebinth (viii. minims) be given in mucilage twice a day, especially after four baths, changing the limb each time for treatment in the cylinders, and giving a bath each day, bringing the temperature up to at least 245° F.

I am of the opinion that as a therapeutical agent the Tallerman superheated dry air is the best we have at present, and there ought to be a great future for it, especially in dealing with that class of cases where the ordinary and long-tried methods fail and defy us. But *perseverance* is required on the part of the *patient* as well as the *doctor*, and experience is always the best teacher.

HEROIN.—Messrs. Bayer and Co. have lately introduced this new drug, which is the di-acetic ester of morphia. The dose is $\frac{1}{2}$ gr. three or four times a day, either in powder or mixture. It is said to possess advantages over codeine, and can be used safely to allay the cough of phthisis or bronchitis.

THE Eden (N.S.W.) correspondent of the *Sydney Morning Herald*, on October 18th, telegraphed as follows:—Several persons suffering from rheumatism have arrived at Eden *en route* for the Kiah whaling station, whither they are going for the purpose of the whale-bath cure. The treatment consists in the patient, divested of clothing, repeatedly remaining for a long time in the interior of the dead whale. Some remarkable cures are said to have been effected by this treatment.

"KEPLER" MALT EXTRACT.—This ideal flesh-forming food is found by medical men to be the most convenient means of administering those constituents essential for replacing tissue waste to phthisical patients or others in whom the normal powers of assimilation are imperfect, without making great demands on the physical powers of the patient. In the case of dyspeptic patients the preparation may be used instead of sugar to sweeten puddings or porridge, or may be taken with milk. It is a convenient vehicle for administration of iodide of iron or hypophosphites, and indeed for many medicines for regular use by children. "Kepler" Malt Extract contains the valuable constituents of malt in the highest state of activity.—BURROUGHS, WELLCOME & CO.

PAPER ON SUICIDE.

BY GEO. COMYN, M.B., "WOODSTOCK,"
BRISBANE.

IN a sparsely populated country like Queensland all losses of population should be carefully guarded against by a paternal Government, and it is no doubt the duty we owe to the land on which we live and thrive, to point out any such losses, and indicate as far as possible appropriate remedies.

Amongst wage-earners a considerable leakage occurs by suicide; for it is not amongst the very young nor the aged that such practices prevail.

The statistics of suicides are very important, and, it is to be regretted, leave much to be desired. Moreover, I think, as far as attempts are concerned, the medical profession has assisted in cloaking many, for which obvious reason of late, particularly in Australia, attempted suicide has rarely been punished by law. Society has countenanced those who offend in this respect by (1) their sympathy, (2) by their presence at their funerals, and (3) finally by attributing to accident, whenever possible, the often obvious act of self-destruction.

The magisterial inquiry in these cases is often an open farce to second public opinion on this matter.

Mr. Coghlan, of Sydney, statistician, says suicide increases with the population, and actually, moreover, there is a growing disposition on the part of the coroners' juries to attribute to accident what is really the result of an impulse of self-destruction.

This admitted fact diminishes the credibility of the record, and makes us alive to the magnitude of the evil.

In the March District Court in Brisbane, there were three cases of attempts at suicide before Judge Mansfield: 1st, poisoning; 2nd, cut throat; 3rd, drowning. All were discharged. His Honour expressed a hope that there would be no likelihood of a repetition of a recent case (Robinson), when prisoner shot himself within a week of his discharge. This conveys to the public mind what offence suicide is against the community.

Sir S. Griffith in his proposed laws submitted to the Society for the Advancement of Knowledge, says: "(1) A person is not criminally responsible for an act of omission if at the time of doing or making the omission he is in such a state of mental disease, or natural mental infirmity as to deprive him of capacity to understand what he is doing, or of capacity

to control his actions, or of capacity to know that he ought not to do the act or make the omission. (2) A person whose mind at the time of doing or omitting to do an act is affected by delusions on some specific matter or matters but who is not otherwise entitled to the benefit of the foregoing provisions of this section is criminally responsible for the act or omission to the same extent as if the real state had been such as he was induced by the delusion to believe to exist."

If this Act is passed, and probably it will be, the majority of attempts at suicide will cease to be punishable by law. This is the opinion Forbes Winslow advocates in his recent work, "Mad Humanity": "Suicide is not an offence that can be deemed cognisable by the civil magistrate. It is to be considered a sinful and vicious action. To punish suicide as a crime is to commit a solecism in legislation."

I have now disposed of the legal, and so shall make a few remarks on the religious, moral and social aspects.

Forbes Winslow says: "The suicides of antiquity have no similarity to those practised now, as we are under a Christian dispensation, and the same reasons do not now hold good."

In the middle ages, when religious sentiment prevailed suicides were considered cowardly, and a strong effort was made to suppress them by sentimental results to the corpse, such as burying at cross roads with a stake through the body, and dragging on hurdles, the re-consecration of the place where the offence occurred.

In the early Christian period suicides were almost unknown. In the middle ages epidemics occurred, and sentimental checks were established which proved useless, and affected the living in an offensive manner, and so fell into disuse, mainly by the refusal of coroners and juries to return a verdict of *felo-de-se*, and substituting suicide while of unsound mind or temporary insanity.

In modern times suicide is considered to be an off-shoot of vanity and egotism, and on that basis, I believe, it must be dealt with, religiously, morally and socially, just as all sins and vices against society are repulsed and checked namely, by education, submission to the inevitable, fortitude in poverty, social admiration diverted from wealth and pleasure to happiness and simplicity, and the suppression of drink and crime. Leuret states: "Suicide is the effect of madness, want, and crime, coupled with moral suffering, balked ambition, vanity, passion, jealousy and shame."

Thornhill Weeden, in his "Queensland," says: "Suicide, caused by the increased strain to

which men are year by year exposed to secure the means to satisfy the expanding desires of advanced civilisation, marks the record of vital social statistics with no uncertain hand." Mr. T. Weeden's opinion of this country must give rise in thoughtful minds that there is something wrong in the education, means and ends held out as desirable, and even necessary, for happiness here. This hedonism on the pursuit of pleasure is, and will continue to be, the philosophy of Australians, and no doubt society here must stand or fall by same. This is already expressing itself by discontent, which rapidly dominates the country and unsatisfied ambition, demanding a surplussage of pleasure over pain, thus confusing pleasure with good and pain with bad, and pursuing only their present, never their future gratification. Herbert Spencer says: "The individual cannot be happy but in a society which is happy, and society is not happy if its units are unhappy." Yet it is admitted that intellectual and scientific pursuits are compatible with a low grade of morality.

Finally, society that permits suicide clubs and the death of its members by the throw of a die, neglects its moral duties, and can well be classed as demoralised.

Medically suicides may be divided into those from monomania and those from any other cause. In the latter case it is hard to believe that a man who has never shown any mental derangement either hereditary or acquired should by the very act of suicide constitute himself of unsound mind, when perhaps immediate misfortunes, incurable diseases, impossible demands, false social and moral education, point to the cause too clearly to be mistaken. Yet under our present system the victim has the questionable benefit of the doubt.

Amongst aboriginals suicide never occurs, except from want of food, nor is it extensively practised in half-civilised countries. It is in the effete and worn out civilisation where it reaches its acme, as in China, Saxony, Denmark. As compared with Christians, the Jews have double the number of mad, and but half the number of suicides. The Germans, who are the greatest offenders in this respect, have no doubt influenced unfavourably our returns.

It is evident from Forbes Winslow's table of 4,337 suicides and causes in London (see next page), poverty, reverses of fortune, gambling, etc., account nearly for three-fourths of the suicides both in London and Australia. The axiom "that poverty is the hell Englishmen most fear" is illustrated. Ambition and love predominate among the females.

FORBES WINSLOW'S TABLE.

	Men.	Women.
Poverty	905	511
Domestic grief	728	524
Reverse of fortune	322	283
Drunkenness and misconduct	287	208
Gambling	155	141
Dishonour and calumny	125	95
Disappointed ambition	122	410
Grief and love	97	157
Envy and jealousy	94	53
Wounded self love	53	53
Remorse	49	37
Fanaticism	16	1
Misanthropy	3	3
Causes unknown	1,381	377
Total	4,337	2,853

Religion has practically ceased to be a cause in 1899. Mulhall, statistician, says: "Circumstances keeping pace with increase of suicides, increase of railways and commerce, consumption of spirits and flesh meat, spread of secular education and infidelity, rapid growth of urban and decline of rural life, high ratio of insecurity, increase of wealth, new system of divorce, and keen struggle for existence in Europe, owing to the great density of population."

All these causes except the last operate amongst us, but with the exception of legislation for inebriates, which will no doubt diminish suicide, as it has done in Norway and Sweden. No other reform is contemplated.

Death by suicide per 100,000:—Saxony, 31.1; Denmark, 23.3; England, 8; Scotland, 5.6; Ireland, 2.4; Australia, 11; Queensland, 15.9.

Return of cause of deaths of suicides from 1879 to 1898:—

Year.	Guns and wounds.	Cuts, stab Etc.	Poison.	Drowning.	Suffoca- tion.	Hanging.	Otherwise.	Total.
1879	5	9	4	8	10	3	40	40
1880	6	5	3	3	3	2	32	32
1881	6	4	3	3	3	2	21	21
1882	11	6	3	3	3	5	40	40
1883	12	2	4	6	3	7	37	37
1884	14	3	10	4	6	8	45	45
1885	4	4	7	5	12	4	36	36
1886	14	11	7	4	3	8	44	44
1887	15	12	10	15	11	6	69	69
1888	15	12	12	10	11	13	63	63
1889	14	13	11	11	11	7	56	56
1890	17	6	20	11	11	13	67	67
1891	19	7	17	13	11	17	73	73
1892	15	10	13	15	11	12	65	65
1893	19	7	14	9	15	8	67	67
1894	21	11	20	12	7	6	76	76
1895	19	16	19	6	6	2	68	68
1896	16	12	19	10	10	3	70	70
1897	23	14	12	8	13	8	80	80
1898	16	18	14	10	11	7	76	76
1890	280	181	236	171	14	93	1,110	1,110

* Included in "Otherwise."

Return showing the ratio per 10,000 of mean population of deaths from suicidal causes for stated quinquennial periods:—

Period.	Average deaths, suicide.	Average mean population.	Rates of suicides per 10,000 of mean population.
1880-1885 ..	34 ..	268,719 ..	1.34
1885-1890 ..	58 ..	375,153 ..	1.55
1890-1895 ..	70 ..	427,792 ..	1.64
1895-1898 ..	76 ..	479,135 ..	1.59

STATISTICS OF QUEENSLAND FOR THE YEAR.

Year.	Month.	Guns and wounds.	Cuts, stab Etc.	Poison.	Drowning.	Suffoca- tion.	Hanging.	Otherwise.	Total.
1894	January	6	1	1	1	1	1	1	9
	February	2	1	2	1	1	1	1	6
	March	2	1	2	3	1	1	1	8
	April	1	1	1	1	1	1	1	2
	May	3	1	1	5	1	2	2	14
	June	1	1	2	1	1	1	1	3
	July	2	1	2	1	1	1	1	7
	August	1	1	6	1	1	1	2	11
	September	1	1	1	1	1	1	1	3
	October	2	1	2	1	1	1	1	6
	November	2	2	1	1	1	1	1	4
	December	1	1	1	1	1	1	1	6
1895	January	1	2	2	3	1	1	1	6
	February	1	2	2	1	1	1	1	6
	March	1	1	4	1	1	1	1	7
	April	4	1	2	1	1	1	1	7
	May	1	1	1	1	1	1	1	4
	June	2	3	1	1	1	1	1	6
	July	1	1	1	1	1	1	1	2
	August	3	1	2	1	1	1	1	8
	September	2	2	1	1	1	1	1	6
	October	1	2	2	1	1	1	1	6
	November	2	2	1	1	1	1	1	3
	December	2	1	2	2	1	1	1	8
1896	January	2	1	1	1	1	2	1	8
	February	1	1	1	1	1	1	1	3
	March	1	1	1	1	1	1	1	1
	April	2	1	3	1	1	1	1	6
	May	4	1	2	1	1	1	1	9
	June	3	3	1	1	1	1	1	6
	July	2	1	1	3	1	1	1	7
	August	1	1	1	1	1	2	1	4
	September	1	2	1	1	1	1	1	4
	October	2	2	4	2	1	1	1	8
	November	1	1	1	1	1	1	1	4
	December	3	3	4	1	1	2	1	10
1897	January	4	2	2	1	1	2	1	9
	February	2	1	1	1	1	1	2	7
	March	1	2	1	1	1	1	1	6
	April	1	1	1	1	1	3	1	7
	May	1	1	2	1	1	1	1	4
	June	2	1	1	1	1	1	1	4
	July	1	1	2	2	1	1	1	7
	August	2	4	1	1	1	1	1	8
	September	2	1	1	1	1	1	1	6
	October	2	1	1	1	1	2	1	6
	November	3	2	1	1	1	1	2	9
	December	2	1	2	1	1	1	1	7
1898	January	1	1	3	1	1	1	1	4
	February	2	1	1	1	1	1	1	7
	March	1	1	1	1	1	1	1	4
	April	1	1	1	1	1	1	1	5
	May	1	2	2	2	1	1	2	9
	June	1	1	1	1	1	1	1	4
	July	1	1	1	1	1	1	1	3
	August	4	1	2	1	1	1	1	9
	September	2	2	4	1	1	1	2	12
	October	1	4	1	2	1	2	1	10
	November	1	1	1	1	1	1	1	7
	December	1	1	1	1	1	1	1	4
		95	70	86	46	2	47	36	372

CASES OF INTEREST.

1. S., about 40 years of age, no religion; occupation, shearer; (Bell's palsy) permanently paralysed on left side of face by a shot of a pistol entering the parotid gland, which occurred in a drunken row in West Queensland. His appearance was rendered so repulsive thereby that he was refused a stand at all large shearing sheds. Moreover, he was requested by hotel proprietors to leave, as disturbing other men's enjoyment. He cut his throat. Death was immediate.

2. J. B., Englishman; originally a stockman; at the age of 45 developed flesh, and from 11st. he grew to be 18st., which rendered him unable to follow his calling, so he became a roadside publican, and not possessing business ability, after a few years was reduced to poverty. As he was unable to work he hung himself.

3. Mrs. S., circus rider, English, aged 50; reduced to position of charwoman; sober, hard-working, but suffering from melancholia; drowned herself. Made *post-mortem*; she was of the soundest constitution.

4. C. M., publican, Austro German, sober; could not meet a bill, but said he would pay it in half an hour; shot himself in an out-house; left large family.

5. Of the five medical men who during the last fifteen years committed suicide here in a state of despondency due to financial difficulty four out of the five did so with narcotics.

6. T. E., solicitor; native; given to drink; muddled some trust estate; told by slander he would pay up all accounts; shot himself; perverted idea of settling accounts with blood, not money.

7. Q., young native, 23 years of age; afflicted with gastric disease from exposure; used quack remedies, and despaired of possible cure; deliberately loaded a gun and shot himself.

8. No doubt some here recollect a well-known leader writer for a principal paper, who took an overdose of opium or morphia.

9. H., two brothers, Victorian natives, young, energetic, well-to-do, both of whom within four years shot themselves.

10. F., young man, native; banker; was engaged to a girl; met with an injury which led to heavy expenses, and ended by a breaking-off of the engagement; used a dynamite cap to kill himself.

11. Mrs. C., aged woman; recently married to young man; tied long garter round her neck and strangled herself.

12. M., highly educated German commercial gentleman, aged 30; sober; first-class musician; muddled accounts; poisoned himself a week after his wife's confinement. It is true in this case an uncle and cousin had already committed suicide.

13. W., civil servant; aged; of unimpeachable character; stamp collector; for some reason unknown used defaced stamp on letters, and was detected. He considered himself disgraced; resorted to suicide. This shows clearly the want of proportion in his mind between the offence and the punishment.

To conclude, it is evident from the few cases I deduce that madness or monomania is not an essential condition pertaining to suicide, though it is often present. There is no doubt epidemics of suicide prevail in large towns like Paris, where seventeen in a day, whole families, have become addicted to this sinful vice by example, principally when education does not inculcate simplicity, fortitude, and self-denial.

Thus the individual resorts to suicide, and forgets that a "live donkey is better than a dead lion."

THREE CASES OF FOREIGN BODIES IN THE ŒSOPHAGUS—TRACHEOTOMY AND ŒSOPHAGOTOMY IN ONE CASE.

By H. L. MAITLAND, M.B., CH.M. SYD., ASSISTANT SURGEON, SYDNEY HOSPITAL, SYDNEY.

THE notes that I am going to read to you this evening are on three cases of foreign bodies in the œsophagus, the foreign bodies being in one case a dental plate and, in the other two, safety-pins.

FIRST CASE.

On September 25th, 1897, I was called to see Mrs. M., aged 29. She was suffering from intense dyspnœa. She was sitting up in bed. The face was cyanosed; the thoracic movements and the action of the accessory muscles of respiration were very much exaggerated. She was very much emaciated. There were large, coarse mucous râles to be heard over chest, back and front; there was abundant mucopurulent sputum. There was no heart or kidney trouble to account for the dyspnœa.

The history I obtained from the husband was that his wife had swallowed a portion of a dental plate in May, 1897. Her throat had been examined on several occasions; she had been "under the Röntgen rays," but it could not be located. She had had two slight attacks of difficulty of breathing about fourteen and

seven days previously, but they had passed off in a few hours. The present attack came on three days ago, and she had been gradually growing worse. She had always been able to take her food with comfort. Her condition was so serious I had her immediately admitted into the Sydney Hospital.

Dr. Brady located the foreign body in the œsophagus, about opposite the cricoid cartilage. I did the low operation of tracheotomy, with immediate relief to the patient. It was then decided to do œsophagotomy. This I did, and removed the dental plate shown. The wound was left open and plugged with iodoform gauze. The patient was fed on nutrient enemata for fourteen days, nothing being taken by the mouth with the exception of ice. The wound healed in five weeks.

DR. BRADY'S NOTES.

"I examined the patient referred to in Dr. Maitland's report when on the operating table in the Sydney Hospital. She was exceedingly sensitive, and a view of the larynx was difficult. I was, however, able to get a view of the glottis, and to say that there was no foreign body in this region. I concluded, therefore, that, if such were present, it must be in the œsophagus. On attempting to explore this part with a sound, severe dyspnoea ensued, and the patient was threatened with suffocation. It was therefore deemed inadvisable to proceed further till tracheotomy had been performed. Under chloroform anaesthesia this was done by Dr. Maitland. With an ivory-tipped bougie I could then clearly detect the foreign body lying behind the larynx in the upper part of the œsophagus. I twice held it in a pair of œsophageal forceps, and used firm traction without dislodging it. Fearing laceration, it was then agreed that œsophagotomy was the safer means of removal. This was very successfully carried out by Dr. Maitland."

The patient made a good recovery from her immediate dyspnoea, but it was found impossible to leave the tracheotomy tube out for more than a few minutes. She afterwards came under my care for treatment of this condition. By laryngoscopic examination, the posterior wall of the larynx, below the cords, and the upper rings of the trachea could be seen to be flattened forward so that they closely approached the anterior wall. All attempts at intubation from above proved futile on account of the extreme reflex sensibility. I therefore had chloroform administered, and, with some difficulty, passed a long-eyed probe from the tracheotomy wound into the mouth. This served

to draw through a strong silk ligature, to which was attached a stout-walled piece of rubber tube, which was then drawn up through the larynx, the lower end being drawn above the tracheotomy wound, into which the usual tube was again introduced. I hoped thus to dilate the compressed air tube, and counted upon keeping the rubber tube in position for several days. Unfortunately, it caused severe pain, and the Resident Medical Officer, at the importunity of the patient, was compelled to remove it in a few hours.

Remarks.—The foreign body, an upper-tooth plate was lodged in the œsophagus for five months. The patient had been frequently examined by medical men, who passed sounds into the œsophagus and could not discover a foreign body, and attributed her symptoms to hysteria. She could swallow fairly well, but had suffered from increasing dyspnoea. These facts are explained by the position and form of the foreign body, an upper-tooth plate, which has the form of an arch. The crown of the arch was directed forwards against the cricoid cartilage and upper rings of the trachea, which, from continued pressure, became absorbed, allowing the air passage to become compressed, while food and the bougies of the surgeons passed under the arch without much obstruction. It is probable that gum-elastic bougies were used—when a whalebone bougie with ivory tip was used, its impact against the foreign body was clearly discernible.

When seen later, the patient was still wearing the tracheotomy tube. She had a fairly good voice, and, feeling comfortable, she declined to have further efforts made to dilate the larynx.

6th October, 1899.—The patient's condition is good, and has just gone through her confinement without any inconvenience.

SECOND CASE.

A child, aged 8 months, was said to have swallowed a safety-pin. Nothing could be felt in the throat; a skiagraph revealed the presence of the safety-pin in the œsophagus, about one inch below the level of the sternal notch. After consultation with Dr. Armstrong, it was decided, owing to the position of the pin (which was open and point upwards), to push it down into the stomach under ch.cl. This was done by means of a Belfast linen bougie. The child had no further discomfort, and passed the pin by the bowel four and a half weeks later.

THIRD CASE.

A miner, aged 34, consulted me last year. He had an abscess about the size of a small orange on left side of his neck, about the level

of the cricoid cartilage. The history he gave was that, while at sea, he had swallowed a safety-pin three weeks previously. He felt considerable pain in his neck at the time, and that his neck had begun to swell three days after. He stated that the swelling had been increasing in size, and that he had had several shivering attacks the previous day. I made a small incision along post border sterno-mastoid, where the abscess was almost pointing. The safety-pin was felt by the scalpel on making the incision, and was easily withdrawn; it was almost straight and lying point outwards. The wound was plugged with guaze and patient fed by nutrient enemata for five days, the wound healed in a month. The peculiar interest in this case is that the great vessels escaped perforation, and also that the abscess pointed towards the surface.

(For discussion on this paper see page 506).

MEDICO-LEGAL CASE.

By ARCHD. A. HAMILTON, B.A., M.B., B.Ch.
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HAVING had the misfortune to figure recently in the local court as defendant in an action for damages, brought against me by a patient, I thought it might be of interest to the Society to have the facts of the case placed on record.

The case for the plaintiff, F. S., *æt.* 10½, was that in December, 1898, he was brought to me suffering from a broken arm; that, owing to my negligent treatment, his parents had subsequently to seek other advice, and that an operation had to be performed on the arm; that the plaintiff was put to considerable expense, bodily suffering and mental anxiety, and claimed damages to the amount of £30.

The history of the case is briefly as follows:—

Plaintiff's father is a member of a lodge, and he and his family have been lodge patients of mine for many years—sixteen or seventeen.

On December 9th, 1898, Mrs. S. brought to my house her son F. S., aged 10½, who had fallen from a tree and was suffering from a fracture of the right radius. I set the fracture and put the arm up in two straight wooden splints. The splints were taken off and the arm examined on the 10th, 15th, 22nd and 30th December. On the 30th December the splints were finally removed, the arm being left in a sling. The boy was not brought back to me after the 30th December.

Some days later Mr. S. called upon me and stated that his son had been taken to another doctor, who said that the arm would have to be

operated upon. I said that, as the case had been taken out of my hands, I could do nothing in the matter. Mr. S. did not bring the boy to me, nor ask me to see him again. Some time afterwards, in consequence of a complaint made by Mr. S. to the lodge, a committee of enquiry was appointed, and I was served with a copy of the complaint and a notice to attend at the lodge-room on a given date.

An enquiry was held, the plaintiff, his father, his mother and myself being present. The committee heard the evidence, and, after due deliberation, reported as follows to the lodge:—"We, your committee, having gone very carefully into this case of Brother Schell v. Dr. Hamilton, have come to the following verdict: That Dr. Hamilton should have had an opportunity given him of seeing and testing the arm at least once after the splints had been taken off on 30th December, 1898, that the doctor was not fairly dealt with, and we unanimously agree that Dr. Archibald A. Hamilton is 'not guilty' of the charge brought against him by Brother Schell." This report was laid before the lodge at a subsequent meeting and adopted by them.

Some time afterwards I received a communication from Messrs. Kingston and McLachlan, asking me to compromise the matter. This I placed in the hands of my solicitors.

Ultimately the case came on for trial on the 5th October before Mr. J. G. Russell, S.M., and Messrs. A. Mackie, J.P., and W. Longbottom, J.P. Mrs. S., mother of the plaintiff, appeared to give evidence in place of her husband, inasmuch as she is more glib of tongue. She testified as to the occurrence of the injury, and to having brought the boy to my consulting rooms on different occasions. Stated that she had called my attention more than once to an irregularity near the wrist, which I had informed her was due to formation of new bone and would disappear in time. Described a protuberance about the size and shape of half a pigeon's egg on the outer side of the wrist, that is, on the ulna. Said that at the last visit, when I removed the splints, "the doctor moved the hand and fingers, but when the boy tried to turn his hand he could not do it." Further testified that on Tuesday, 3rd January, she took the boy to the out-patient department at the Adelaide Hospital, and there saw Dr. Shepherd. In consequence of what he said, she took the boy the same day to Dr. Hynes, who examined the arm. The boy was taken to Harcourt House, Franklin street, on the 4th January, where Drs. Hynes and Ramsay Smith made a joint examination. On Wednesday, 5th

January, the boy was put under an anæsthetic at Harcourt House and operated upon by Drs. Hynes and Smith. He was poorly for a couple of days after that.

Mrs. S. also gave evidence as to the enquiry held at the lodge.

Mrs. S., in cross-examination, was unable to state how many other children were at home during the time the boy was under treatment.

Dr. Shepherd gave evidence as follows:—

"I saw the plaintiff and his mother at the out-patient department of the Adelaide Hospital on Tuesday, 3rd January last. Examined him. Found a badly-united fracture of the lower end of the right fore-arm. The hand was in a prone position, supination was impeded. He could turn the arm by turning the elbow. There was a curve in the inner bone of the arm, the ulna."

Cross-examined: "I made a careful examination. The boy would be ten or twelve minutes in the room. I am of opinion that there was a Colles' fracture of the radius. Could not say how far it was up the radius. Would not swear there had been a fracture of the radius at all. Will pledge my word that there was something wrong with the ulna, but won't about the radius. I had conversations with the other doctors about this. My recollection has been revived by those conversations. I made notes at the time, the same day. I have not got them. They are in the out-patient department of the Adelaide Hospital."

Dr. Hynes' evidence:—

"I saw the plaintiff on the 3rd January. Examined him. Found that his right arm showed evidence of recent fracture, and that the bones were out of position. It was not a proper condition for a fracture that had been treated. The use of the arm was impeded. The boy was unable to pronate and supinate his hand without doing it from the shoulder. I do not think it would tend to get better. The ulna met at an angle at the junction of the broken parts. I saw the boy the next day with Dr. Ramsay Smith. Next day, 5th January, we operated. I gave the anæsthetic, and Dr. Smith set the arm. The boy took the anæsthetic badly and nearly died."

Cross-examined: "I do not remember if I gave chloroform. I am almost sure it was not, but will not swear it was not chloroform. My notes would not contain an entry. I am almost sure I used A.C.E. mixture. When the boy was brought to me I don't remember if I noticed anything wrong with the radius. I did on the third occasion. I saw the boy twice before the operation, and on each of these occasions examined

the arm. I do not remember if I noticed anything wrong with the radius. I noticed the ulna bent. I do not think that would be in the notes. I am of opinion that both bones had been broken. There was callus when I made the final and other examinations. The callus was about one inch from the wrist, on the radius, not two inches. There was positively callus on the ulna. I am positive I detected callus on both. My notes were only of the visit. I thought this a straight-out case—that is, a case that one has not to consider. Did not know that this implied a charge against defendant. It is out of the ordinary. It is not strange that I did not make a note. I knew that the defendant was the lodge doctor and had attended the boy. I heard the story, but forget the details. I suggested that she had better go back to Dr. Hamilton. A boy's arm should be kept in splints three to five weeks. I would not say in preference to two or three weeks. An arm is always stiff to a certain extent when the splints are taken off. The acts of pronation and supination are possible to the patient when the splints are taken off, and are not unusual. After the splints are taken off and the arm put in a sling, I expect the surgeon to still superintend the case and look after it later than that. Sometimes from slight causes the bones get out of place. The most excellent surgeon may have to put the splints on again from no fault on his part, and that may happen from very slight causes. Callus at first is soft and gradually gets harder. You do not keep the splints on till it gets absolutely hard. The splints ought not to be taken off till the callus is formed, and the bones thus united. It is at times difficult to detect a fracture of the ulna—not more difficult than to detect a fracture of the radius. If the ulna and radius are both broken there would be no difficulty in detecting it; usually it would be self-evident."

"Say the splints were taken off a week or ten days before you saw the arm, might these irregularities have occurred after the splints were removed?"—"It might have taken place in a week or ten days."

Dr. William Ramsay Smith *examined*:—

"I saw the plaintiff at Harcourt House in the beginning of the year. I found a badly-united fracture of the bones of the fore-arm, some little way above the wrist. The boy could not turn his hand if the elbow was held. He had also lost a good deal of the use of his fingers. The bones had been broken across, and, instead of being roughly in line, they were stuck together at an angle. It was rigid. I think it had been in that position certainly

not less than a week. Next day I broke the arm at the seat of the fracture, or as near to it as I could possibly get. I had to use so much force that I was afraid I should tear the wrist asunder. I was prepared to chisel the ends of the bones asunder to get them into proper position. That was the alternative operation. Did not see the boy again till to-day. Do not know how he took the anæsthetic. I am not sure whether I commenced the administration of the anæsthetic or not. I may have done so while Dr. Hynes was getting the instruments ready. If I did, the chances are I gave him chloroform, pure and simple. A boy of his age should be able to use his arm in from three or four weeks. After the new setting I could not tell how long it would take for the arm to get strong. That would depend on the bone moulding. In a properly united fracture there may be no sign of the bone having been broken. Human beings do not develop callus in properly set fractures. I have been listening to a dissertation on pig and dog pathology this morning. Human beings do not develop callus to the extent that pigs and dogs do. The deformity was due to bad setting of the bones. There was not any amount of callus to be re-absorbed."

Cross-examined: "I examined the boy first on Wednesday. I do not think I administered an anæsthetic then. On Wednesday I made up my mind that both bones were broken. I do not know if there was callus on the radius. There was a swelling on the radius. I cannot recognise callus unless I have it under the microscope. There might have been some callus. There was a lump on the ulna. I have done the chiselling operation in the old country. In Adelaide I have been more a physician than a surgeon. I took my degree in 1892. My memory is in a jumble, but I think I was a physician at the Adelaide Hospital in 1896. I came to the colony in 1896. From 1892 to 1896 did surgical and consulting work. The operation I performed was very dangerous. I think I have done a similar operation before, but am not sure. I applied the force with my hands. It is difficult and risky to break a boy's arm like this. If the union is complete you are apt to break the bone away from the old seat of fracture. I think I have broken a child's bone before, but cannot swear it. My surgical and pathological experience justifies me in saying that after an interval of nine months not a sign could be found of it. I think that is possible. I have never found an arm in which both the bones were broken, re-broken, and did not leave a trace of the fracture

so that a skilful surgeon could not find out if there had been a fracture at all. In my own practice I have allowed a child to use his arm under three weeks. I should not have expected Dr. Shepherd to have detected the fracture of the radius and the ulna—it would depend on what end he had in view. I should have expected Dr. Hynes to detect both breakages. I did not know that another medical man was involved in the case. I did not know that Dr. Hamilton had had the case. I believed some doctor had had to do with the case. Did not know that it was not Dr. Hynes."

Cross-examined as to the anæsthetic: "I know nothing about the boy coming round. Was not looking at the boy. Had nothing to do with whether he came round or not. I was at the other end of the boy. I felt no fear or otherwise as to whether the boy came round or not. It was not my business. Do not remember whether I left the house before or after Dr. Hynes."

Re-examined about Dr. Shepherd: "When I said 'what end he had in view,' I meant whether it was an in-door or out-door case, or a case for the hospital at all."

This closed the case for the prosecution. My counsel, Sir John Downer, Q.C., then made a short speech, in which he outlined the defence, and further pleaded that, inasmuch as the dispute was one concerning lodge matters, between a member and an officer of the lodge, and had been submitted to a duly constituted tribunal appointed by the lodge in accordance with the rules of the society, and adjudicated upon thereby, that decision was, according to the Friendly Societies' Act of 1886, a bar to any further proceedings in a court of law. This point was argued by the opposing counsel at some length, and the Bench finally decided that it was a good defence.

Witnesses were then called to prove that a complaint had been made, that the lodge committee of enquiry had been properly appointed and constituted, had sat and given its decision, which was subsequently ratified by the lodge, and that all the necessary formalities in connection with the enquiry had been duly observed.

Judgment was then given for the defendant. The case having been thus decided on a legal point I was deprived of the opportunity of giving evidence myself, or of putting witnesses for the defence into the box. I therefore propose to lay before you the statement which I was prepared to make on oath, and then review the evidence of the other side. On the 9th December, 1898, F. S., *æt.* 10½, was brought to my

private house with a history of a fall. I found a transverse fracture of his right radius, about two inches above the wrist. The ends of the bone were displaced inwards towards the ulna. It was not a Colles' fracture. *There was not a fracture of the ulna.* I set the fractured radius and put the forearm up in two straight wooden splints and a sling. Next day the boy was brought to my consulting rooms, where I took off and re-adjusted the splints, the following note appearing in my diary: "Mr. S. son—fracture of radius—put up yesterday—adjusted bandage." The arm was examined again on the 15th, 22nd, and 30th December, the splints being removed on each occasion. The splints were finally removed on the last visit, 30th December. The arm was then in good position, and, on testing the movements of pronation and supination, *vide* evidence of Mrs. S., I found them perfect.

Then the mother put the boy's arm in the sling under my superintendence, and took him home, having been warned to look after him carefully. I expected, of course, to see him again in a few days.

Mrs. S. is, I may mention, the mother of about fourteen children, and many weeks have never passed for sixteen or seventeen years without one or other of the family being under my care.

The next time I examined the plaintiff was when this case was pending, and Drs. Corbin and J. A. G. Hamilton kindly examined the boy's arm with me at his parents' house on the 18th September, 1899. Then the condition of the arm was as follows: The bones were straight and in good position, and the movements of the arm perfect. On the radius, quite two inches above the wrist, was a well-defined ridge, unmistakably marking the site of an old fracture, and formed by the remains of unabsorbed callus. The ulna, on the contrary, was absolutely smooth, and presented no sign whatever of injury. Drs. Corbin and J. A. G. Hamilton will corroborate this statement. Yet we are asked to believe that "both bones were broken across," "stuck together at an angle" re-broken with the exercise of so much violence that the operator feared he would "tear the wrist asunder," re-set, and, that eight months after all this violence, and displacement of young growing bones, close to a joint, the ulna is absolutely smooth and free from the slightest irregularity or unevenness. This, too, in the face of the fact that the radius which was under exactly the same conditions as to rest, etc., shews such well-marked traces of the fracture.

Mrs. Schell fairly describes the condition of the arm as it appeared to a non-professional observer: "An irregularity on the bone," i.e., the callus on the radius and "a protuberance about the size and shape of half a pigeon's egg on the outer side of the wrist," referring to the ulna as on the outer side. This was the styloid process of the ulna, which, owing to the atrophy of the soft parts, presented what was to her mind an unnatural projection. Exactly the same anxiety was lately expressed as to the apparent projection of the styloid process of the ulna, by the mother of a boy whom I treated for fracture of both bones of the forearm, when the splints were first removed.

In Dr. Shepherd's evidence there is a vague uncertainty which makes one wonder what his evidence would have been had not "his recollection been revived by conversation with the other doctors." True, he had "made notes," but not even a copy of that valuable document was forthcoming. It is not the least curious feature of this interesting case that not one of three individuals who gave expert evidence on behalf of the plaintiff was able to produce a single scrap of documentary evidence as to his impressions at the time when he saw and examined the arm, though the case was obviously one which entailed a row.

Dr. Shepherd swears—

"I made a careful examination. The boy was ten or twelve minutes in the room. There was a badly united fracture of the lower end of the right forearm. I am of opinion that there was a Colles' fracture of the right radius. Could not say how far it was up the radius. Would not swear there had been a fracture of the radius at all. Will pledge my word there was something wrong with the ulna, but won't about the radius."

Dr. Timothy Augustine Hynes then testifies—

"The right arm shewed evidence of recent fracture, and the bones were out of position. The boy was unable to supinate and pronate the hand. The ulna met at an angle at the junction of the broken parts."

On being cross-examined Dr. Hynes admits that he does not remember noticing anything wrong with the radius till the third time that he examined the boy, that is, when he and Dr. Ramsay Smith were about to operate. "I did on the third occasion" he says. "I noticed the ulna bent." I do not think that would be in the notes. "I thought this a straight out case." Curious then that it should have required three careful examinations, at two of which he had the assistance of Dr. Ramsay

Smith, to make the witness' mind clear as to whether one or both bones were broken.

There is still here a good deal of the vagueness which characterized Dr. Shepherd's evidence.

This vagueness is still further exemplified in his evidence about the anæsthetic.

"The boy took the anæsthetic badly and nearly died. I do not remember if I gave chloroform. I am almost sure it was not, but will not swear it was not chloroform. My notes would not contain an entry of the anæsthetic used."

Remember it was from an examination made on this occasion, under these trying circumstances that Dr. H. is enabled to swear that he remembered having noticed anything wrong with the radius at all. Dr. William Ramsay Smith, the next witness, qualified in 1892, spent some time in general practice at Rhyl, a watering place in North Wales, came out here in 1896, and has since held a purely medical appointment as Senior Physician to the Adelaide Hospital. Dr. Smith is positive and graphic in his description of the arm. "Both bones were broken across and stuck together at an angle. The boy could not turn his hand if the elbow were held."

In my experience it is most unusual for a boy with a fracture of one or both bones of the forearm, whose arm has been in splints for three weeks, to regain the full power of pronation and supination within four or five days of the removal of the splints, especially under circumstances where no intelligent application of massage or passive movements was attainable.

Dr. Smith then stated that "human beings do not develop callus in properly set fractures."

According to the authorities, the essentials for the union of broken bones without the development of provisional callus are as follows:—Fracture in an adult bone; little, if any, displacement; little or no injury to the periosteum and soft parts, and absolute immobility during the process of repair.

In this case we have exactly the opposite conditions, viz.:—Fracture in a young bone, comparatively close to a joint with considerable displacement, entailing necessarily corresponding injury to the periosteum and soft parts.

Having relegated the "callus" of his colleagues to the lower animals, Dr. Smith introduces a novel mode of repair, to wit, "bone moulding." "I could not tell how long it would take for the arm to get strong after the new setting—that would depend on the bone moulding." Dr. Smith states that he had to

employ so much force to re-break the arm that he was afraid he would "tear the wrist asunder." That was on the 27th day from the date of the fracture.

The 1894 edition of Taylor's "Medical Jurisprudence," vol. i., p. 706, says:—"The callus assumes a cartilaginous structure in from sixteen to twenty-five days, and it becomes ossified in a period varying from three weeks to three months. It requires, however, a period of from six to eight months for the callus to acquire all the hardness, firmness and power of resisting shocks possessed by the original bone. A force applied to a recently united bone will break it through the callus or bond of union, while after the period stated the bone will break as readily through any other part." "It is well-known that a bone seldom unites so evenly that the point of ossific union is not indicated by a node or projection."

Treves' "Manual of Surgery" (Vol. II., p. 19), after describing at some length the formation of callus, goes on to say:—"The process of ossification usually commences about the end of the first, and is often considerably advanced by the end of the third week. The result is that, in the course of four to eight weeks, the bones become firmly united by a mass of newly-formed osseous tissue, which at first is spongy and cancellous."

Erichsen, in his "Science and Art of Surgery" (6th Ed., Vol. I. p. 277), speaking of the repair of fractures, after describing the formation of callus and the tissues concerned in its production, says:—"From the third to the fourth week the lymph has assumed a sufficient degree of firmness to keep the fragments in apposition, though the bone still yields readily at the seat of fracture. This lymph, which is poured out not only by the periosteum and bone, but by all the soft parts in the neighbourhood of the fracture, gradually undergoes ossification, the bony matter being first deposited in a granular manner, but in sufficient quantity by the sixth or eighth week to unite the fracture rather firmly."

Rose and Carless, in their "Manual of Surgery" (1898, pp. 366 and 368), describe the deposit of callus in the form at first of granulation tissue, then "calcification of this material follows, preceded or not by a cartilaginous or fibrous change, and this calcified material is in turn replaced by bone, which, at first soft and spongy, becomes after a time firm and sclerosed." "Calcification commences about the end of the second week. By the fourth or sixth week, according to the size and vascularity of the bone and the recuperative power

of the individual, the fracture will be consolidated."

In the face of these quotations, which might be indefinitely extended, it is not easy to credit the statements made as to the amount of force used.

So far Dr. Smith's evidence is positive even if it does make demands on our credulity. In cross-examination there is some uncertainty: "I don't know if there was callus on the radius. There was a swelling on the radius. There might have been some callus. I cannot recognise callus unless I have it under the microscope. I think I have done a similar operation before, but am not sure. I think I have broken a child's arm before, but cannot swear it."

Dr. Smith had only to tax his memory for seven years, during three of which he held a purely medical appointment; and yet we are asked to believe that he cannot remember whether or not he has ever before performed what he describes as "a very dangerous operation," and later on in his evidence refers to as "difficult and risky."

With regard to the anæsthetic, Dr. Smith's evidence is remarkable. Dr. Hynes, you will remember, swore that the boy took the anæsthetic badly and nearly died.

Dr. Smith states on oath:—"I do not know how he took the anæsthetic—I am not sure whether I commenced the administration of the anæsthetic or not. I may have done so, while Dr. Hynes was getting the instruments ready. If I did, the chances are I gave chloroform, pure and simple."

Cross-examined: "I was not looking at the boy. Had nothing to do with whether he came round or not. I was at the other end of the boy. I felt no fear or otherwise as to whether the boy came to—it was none of my business."

This evidence does not seem to me to call for any comment of mine. It is not such as to inspire respect for the speaker as a man, or confidence in his judgment as a practitioner, or his reliability as a witness.

I have now laid the case before you as fully and accurately as possible. In giving the evidence, I have taken the utmost pains to give the *ipsissima verba* of the witnesses, and can vouch for its accurate reproduction, omitting, of course, many repetitions, etc.

Before closing, I should like to publicly express my very deep sense of gratitude to those friends and colleagues who so loyally supported me throughout what has been a most unpleasant experience. Drs. Corbin, J. A. G. Hamilton and London not only remained in Court during the whole trial, which meant the

loss of a day and a half during the very busiest time of a severe influenza epidemic, but, with the utmost unselfishness, spent many hours besides in consultations over the case.

This case emphasises the wisdom of Dr. Swift's remarks in his recent Presidential address as to the special necessity in this colony for the existence of a Defence Association.

(For discussion on this paper see page 509.)

PROCEEDINGS OF BRANCHES.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE regular monthly meeting of the Branch was held at the Royal Society's Room on Friday, 27th October, 1899, at 8.15 o'clock. Present: Dr. E. T. Thring (President, in the chair), Drs. L. K. Ellis, Lawson, Litchfield, Cohen, Maitland, W. Chisholm, W. H. O'Neill, Palmer, R. H. Jones, Neale, Furnival, F. A. Bennet, Sinclair Gillies, Jamieson, W. H. Goode, Parker, West, Arthur, Gladden, George Armstrong, Walker-Smith, Crago, Clark, Hall, Blackwood, Gordon Craig, Kyngdon, Sawkins, Macdonald Gill, Kirkland, Pilkington, Chas. MacLaurin, Binney, Murray Will, Clarence Read, Neill, J. A. Dick, Clubbe, S. H. Hughes, Barrington, Hankins.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the election of Drs. Turkington, F. A. Bennett, Ellis, and R. B. Wade, and the nominations of Drs. G. H. Rowlands and Lipscomb.

Dr. MAITLAND read "Notes on Three Cases of Foreign Bodies in the Oesophagus." (See page 499.)

Dr. W. H. GOODE said he had listened with great interest to Dr. Maitland's paper, especially as he remembered the cases in the hospital. In the first case the difficulty to contend with was the smooth surface of the tooth plate. In the second case the safety-pin, being open, must have caused some little anxiety to the medical man. He (Dr. Goode) remembered a case where a man swallowed a gold tooth plate, to which there were two projecting hooks. This plate was passed by the rectum, and no further trouble arose.

Dr. CHISHOLM said he assisted Dr. Clubbe at an operation at the Children's Hospital. The child had an open safety-pin in the larynx, and in extracting it it slipped back, and was ultimately passed by the rectum.

Dr. MAITLAND said the reason why the plate had not been located by the Röntgen rays was because it was more or less hidden behind the vertebra.

Dr. O'NEILL read a paper on "Some Notes on Tuberculosis and its Treatment in Australia." (See page 485.)

Dr. L. E. ELLIS mentioned a case in the Prince Alfred Hospital which had been treated with creosote, with good results. The man was losing at the rate of one pound weight each week on his admission to the hospital, but after taking the creosote he gained in weight and generally improved; but when he left the hospital and gave up the drug, he went back. It might, of course, have been the diet he received at the hospital, but the fact remains that he improved while taking the creosote.

Dr. WEST said he was glad to hear Dr. O'Neill lay stress on the climatic treatment of this disease. He (Dr. West) had found Orange and Armidale eminently

suitable for the treatment of tuberculosis—every case he had sent to these districts had done well. A medical practitioner, residing in one of these districts, informed him that he did not know of a single case of phthisis having commenced in the district—that all the cases had been brought there. It was certainly necessary for medical men to know what particular places had a climate which suited these cases. Hay and Bourke, to his (Dr. West's) mind, were too hot in the summer months. He could bear testimony to the great benefits derived by phthisical patients from the climate of Orange and Armidale.

Dr. LAWSON agreed with Dr. O'Neill as the question of drugs in cases of tuberculosis. He lived in the Riverina district at one time, and found it totally unsuitable for such cases. In the wet season it was muggy and in the summer the dust storms were terrific.

Mr. HANKINS said: With regard to the inunction of guaiacol, he would ask Dr. O'Neill if he had ever observed any serious results accompanying a sudden subnormal fall in the temperature of the patient. He (Mr. Hankins) understood that Dr. O'Neill used the old tuberculin both for diagnostic purposes and treatment. Whether the old or new tuberculin were referred to he (Mr. Hankins) thought it most unwise to allow patients to administer the injections themselves. Apart from the dangerous nature of the substance and the necessity for strict aseptic precautions in the operation, he thought that, for obvious reasons, it was a mistake to encourage patients to take the treatment into their own hands.

Dr. SINCLAIR GILLIES said it was to be regretted that this paper had not appeared on the business paper, as preparation for the discussion could then have been made. He would suggest that the discussion be adjourned until the next meeting, so that the whole question as to the spending of the money raised for the Queen Victoria Consumptive Homes and other matters involved could be properly discussed and a definite determination come to.

Dr. GORDON CRAIG said that this matter had been discussed very fully last year, and the whole of the debate appeared in the *Australasian Medical Gazette*.

Dr. SYDNEY JAMIESON said it might be thought by some that nothing was being done in the matter of the Queen Victoria Homes, but it must be remembered that Dr. Sydney Jones was collecting all the information he could on the subject, and until he had finished his investigations and reported the result, nothing further could be done. It was more than likely that the scheme propounded by Dr. Sydney Jones would be placed before the profession for an expression of opinion. With regard to Dr. O'Neill's criticism of the Thirlmere Home, he would like to point out how the place was crippled for want of funds, so much so that the matter of classification could not be gone into at the present time. However, every effort was made to prevent the spread of the disease. All the sputum was incinerated. It was hardly fair to say that no means were being adopted to check the spread of this disease.

Dr. THRING said he thought it was rather premature to discuss the whole question, seeing that Dr. Sydney Jones was collecting particulars of the matter. The recollections of the previous discussions were rather wearisome, and he did not think anything would be gained by postponing the discussion. No one doubted the importance of the subject, but it must be borne in mind that the prevention of this disease was of as much, if not more importance than its curing. With regard to drugs, he did not lay much stress upon drugs in such cases.

Dr. O'NEILL said he was glad to find the general endorsement of most of his views. With regard to the reduction of temperature by the rubbing in of guaiacol, he had not found such to be the case. In painting with it, perhaps, the reduction would occur, but he (Dr. O'Neill) always mixed the guaiacol with vaseline and lanolin, and had found it to act well. As to the question of patients being allowed to inject the tuberculin themselves, of course it was not done in every case, but in the cases he had allowed it no bad results occurred. With reference to the Thirlmere Home, he was of opinion that it would be better to close it up, rather than run it on wrong lines. He saw where the committee had waited on the Government with a view to a £ for £ subsidy, and thought by that that something would shortly be undertaken.

Dr. WEST moved,—"That the practice of personally canvassing individual members of lodges which is now adopted by some members of the New South Wales Branch of the British Medical Association when applying for lodge appointments is objectionable, and that members so offending should be asked to discontinue the practice," and said the practice which now obtained of medical men canvassing each member of a lodge, with a view of getting the appointment of medical officer, was, to say the least of it, most reprehensible, and men who adopted such tactics gained an undue advantage over those who did not canvass. Recently applications were invited for a lodge in the Glebe district. Two local men did not canvass, but the other two men, who were new to the district, canvassed, with the result that one obtained the appointment. Several members of the profession do not think this resolution goes far enough, and would penalise the man who canvassed, but he (Dr. West) was satisfied to have this resolution passed, and then if no good resulted he would proceed further with the matter. When a man canvassed for these positions he put himself under a compliment to certain individuals, and that could not possibly be for the good of the medical man. There can be no question that the medical man who canvasses for these lodge appointments must have an advantage over those who will not canvass. The proper method would be for each applicant to lodge his papers with the secretary, and there let the matter rest.

Dr. SAWKINS said he had much pleasure in seconding the resolution. The practice of canvassing was most degrading, he had been forced to do it because others did it, but he fully recognised that it was degrading, and so long as some stringent rule was wanting so long would the practice continue, and personal canvassing would go on in its pernicious course putting medical men in a false position as regards the members of the lodges.

Dr. LITCHFIELD said he agreed with the spirit of the motion. The question, however, was, was it wise to pass it at the present time? The practice had been going on vigorously for some time, everyone had gone in for it more or less. If this resolution were passed, and canvassing still went on, what would be the position of the Branch? He thought it would be better to postpone the matter until a list of the medical men who were prepared to give up the practice of canvassing for lodges was obtained. It had been found difficult to maintain the boycott of the People's Prudential medical men, and it would be far more difficult to deal with those men who contravened the proposed rule. If the Branch gives a command in this matter it should be prepared to go through with it. Personally he had a great objection to canvassing, but while others did it he did not see how the practice was to be stopped.

He (Dr. Litchfield) would move as an amendment, "That the consideration of this matter be postponed until a list of all the medical men prepared to give up the practice of canvassing for lodges be obtained."

Dr. ARMSTRONG said Dr. Litchfield had struck a warning note, which was well worth considering. If this resolution were passed, could the Branch insist upon it being carried into effect? If not, what was the use of passing it? He (Dr. Armstrong) had canvassed, and had been beaten. He thought it would be well to get the sense of the medical men who would take lodges. The private practice was in the hands of the senior members of the profession; the club practice was therefore all that the juniors had to fall back on. He certainly thought the Branch should go slowly in this matter, and take fully into consideration all the facts of the case. He had much pleasure in seconding Dr. Litchfield's amendment.

Dr. CRAGO said the members of lodges thought the practice of medical men canvassing degrading, and while he would not go the full length of penalising men, he thought something should be done to cope with the difficulty.

Dr. GLEDDEEN said the practice of personal canvassing ought to be put a stop to. When he came to Sydney two years ago he thought he had done with lodges, but it was necessary to go in for them again, as unless a man was prepared to wait for five or ten years, there was no chance of putting a practice together. He had canvassed once, but would not do so again, as he felt it degrading. He did not think there was much to fear from the medical officers of the People's Prudential getting the lodges, as the officers of the lodges knew that these men would not be met in consultation; therefore, they would not be acceptable. He thought some arrangement should be come to among those who were prepared to do this work.

Dr. THRING said he had no experience in this matter, as he had never held lodges. There appeared to be a good many excuses for the practice, but it seemed to him to be most degrading, and he hoped it would cease.

Dr. BINNEY said that the whole evil lay in the fact that the election of the medical officer remained in the hands of the members; until this could be remedied the trouble would continue. He thought that a conference between the medical men and the friendly societies might bring about a better understanding, and let the election of the medical officers be in the hands of the officers of the society much in the same way as the board of directors of the hospitals act in filling up vacancies on the hospital staff.

Dr. READ said he objected to canvassing in all its phases, both as regards hospital appointments and friendly societies.

The PRESIDENT then put the amendment of Dr. Litchfield to the meeting, and it was negatived. The resolution was then put, and carried.

Dr. LAWSON moved, "That the British Medical Association should recognise the North Sydney United Friendly Societies and their medical officers, and that their names be erased from the ostracised list of the Association."

Dr. BENNET seconded the resolution, and the debate was adjourned.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary meeting of the Branch was held at Pleasance Buildings on Wednesday, October 18th, 1899. Present: Mr. A. L. Kenny (in the chair), Dra. G. A. Syme, Andrew, McAdam, A. V. M. Anderson, L. Henry, A. G. Black, Willis, Stevens, D. M. Officer, Kent-Hughes. Misses Sexton and Alexander.

The minutes of the previous meeting were read and confirmed.

The SECRETARY read a letter from the Premier's office with regard to the colonial addendum to the "British Pharmacopoeia."

With reference to the deputation to the Chief Secretary on some points on the Lunacy Act, the SECRETARY reported that no date had been fixed by the Chief Secretary.

With regard to the second item on the business paper the action of the Council was unanimously endorsed by the members present.

Dr. ANDREW showed a crochet needle removed from the bladder in a female, the lower half of which was encrusted with phosphatic deposit, and also some small stones removed from a pouch in the urethra of a female.

Dr. SYME related a case of calculi in the prostatic portion of the urethra of a male, which he thought at first was prostatic calculi, but on examination they proved to be uric acid calculi.

Dr. WILLIS read "Notes on a Case of Tetanus treated by Intravenous Injection of Antitetanic Serum," with recovery.

Dr. SYME had not any experience of tetanus since he was Resident Surgeon. He understood that antitetanic serum should be injected intra-cerebrally. It is important to use antitoxins in sufficient quantity and early in the treatment of cases.

Dr. OFFICER thanked Dr. Willis for bringing the case before the meeting. He thought the result was possibly largely due to the general treatment. Of four cases at the Children's Hospital, one severe and one slight recovered, and two severe died, one after forty days from pneumonia. He would like to ask Dr. Willis if he adopted any local measures and if he found the bacillus.

Dr. WILLIS used strong solution of mercury bichloride to the wound, which was very dirty. He related a case from the *British Medical Journal* of intra-cerebral injection which two months after recovery returned with cerebral abscesses found *post-mortem*. He did not look for the bacillus.

Dr. SYME read "Some Notes on Surgical Tuberculosis in Old Age." (See p. 491).

Mr. A. L. KENNY related a case of tubercular laryngitis (?) in a patient of over 60; the age at first seemed to throw doubt upon the diagnosis.

Dr. A. V. M. ANDERSON related two cases of Pott's disease appearing for the first time in patients over 50 and over 70.

Mr. W. KENT-HUGHES thought that as regards spinal caries in old age pain and paralysis were always more marked than in younger patients. He remembered a case of tubercular disease of the wrist, which was under his care at St. Vincent's in a patient of 64. Dr. Syme advised amputation, and he agreed with his decision. The patient refused, and when last seen was almost well.

Dr. WILLIS had seen several cases of tubercular diseases in old patients.

Dr. SYME apologised for the paper he had just read, as it was so quickly put together. In all his cases

THE *British Journal of Dermatology* for October notices at some length a paper by Dr. Walter Spencer, entitled, "An Outbreak of Dermatitis Exfoliativa Neonatorum," which appeared in the *Australasian Medical Gazette* on June 20th last.

there had been a history extending over a long period of time. In several instances temporary improvement occurred. No acute symptoms as a rule appear. Tubercular disease of spine in old people has been recognised more generally and for a long time. His paper referred more particularly to two classes of cases, viz., tubercular disease of the tongue and of the extremities.

At a meeting of the Branch, held on 16th August last, a short paper was read by Dr. J. N. Fishbourne on the administration of the "Lunacy Act of 1890" in Victoria, especially as regards—

1. The classification of insane.
2. The reception of lunatics.
3. The absence of a receiving-house.
4. The want of licensed houses or an asylum for paying patients.
5. The boarding-out of patients.

Some discussion followed, after which, on the motion of Dr. Springthorpe, it was resolved to ask the Hon. the Chief Secretary to receive a deputation from the Branch on the subject.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

The usual monthly meeting was held at the University on Thursday evening, 26th October, 1899. Dr. Swift (ex-president) presided. Present: Drs. Poulton, London, Symons, Singleton, Cleland, H. Irwin, W. T. Hayward, Watson, A. A. Hamilton, J. A. G. Hamilton, Morgan, Fischer, Stewart, Gregerson, Corbin, Michie, O'Leary, Goode, and the Hon. Sec. (Dr. Gunson).

The President (Dr. Marten) sent an apology for his absence, due to indisposition.

Minutes of last meeting were taken as read, and confirmed.

A reply to a letter of condolence on the death of the late Dr. Whittell was read.

BALLOT.

Dr. Edward Minchin, of Pt. Wakefield, was elected a member.

PAPERS.

Dr. LONDON read a paper on "Cystitis."

Professor WATSON said he had listened with pleasure to Dr. London's suggestive and interesting remarks. He, however, took a charitable view of the tumour-diagnosis of the case treated in a neighbouring institution. A solid oedema of the connective tissue in the *cavum retzii* would have produced a hardness easily mistaken for a malignant tumour, even by the specialists from the old country who treated the case, before it came under Dr. London's notice. Lymphatic obstruction in the perivesical connective tissue had caused a catarrhal condition inside the bladder, which disappeared after spontaneous subsidence of the causative pericystitis.

REMARKS ON DR. LONDON'S PAPER ON CYSTITIS.

Dr. J. A. G. HAMILTON said undoubtedly there were a number of cases of cystitis set up by too frequent use of the catheter, especially after abdominal sections. These cases were generally of the catarrhal form, and usually readily yielded to washing out of the bladder and the internal administrations of salol, boracic acid, etc. Lawson Tait said these cases were avoidable, and laid it down as a rule that if any case of cystitis occurred in his practice after use of a catheter the nurse in charge of the case was immediately dismissed.

No doubt the number of cases have greatly diminished since greater care has been used in keeping the catheter absolutely aseptic, and in preparing the vagina, urethra, etc. In his practice only nurses of long experience in this sort of work are allowed to pass a catheter, and they have the fullest instructions about antiseptic precautions, which he believes are strictly adhered to, but still occasionally a patient who has had a catheter passed for some days will get cystitis. He has been considerably exercised in his mind as to the cause, but had failed to find a satisfactory explanation. Whilst doubting they are of a septic character, they may be due to some irritation in urethra set up by the passage of the instrument. In chronic cases he had found more benefit from instillation of a few drops of 1-5,000—1-10,000 solution of hydrag. perchlor. than in washing out with a similar solution. He was sorry Dr. London had not tried Howard Kelly's treatment for cystitis in his chronic case. It consisted in ballooning the bladder with a rubber bag smeared with iethyol gelatin. This appeared to him typical treatment, as it brings the local application in direct contact with every part of the bladder.

Dr. POULTON then read his paper, "Sarcoma of Colon." (See p. 477.)

Dr. A. A. HAMILTON read "A Medico-Legal Case." (See p. 501.)

DR. CORBIN'S REMARKS ON DR. A. A. HAMILTON'S "MEDICO-LEGAL CASE."

Dr. CORBIN considered that Dr. Hamilton was entitled to the sympathy of members on account of the case being decided on a technical legal point, whereby he was unable to present his version of the transaction in court and satisfy the public that he had not treated the case carelessly or unskilfully. He (Dr. Corbin) had seen the boy early in September and examined the arm. The fracture of the radius was apparent enough. The two portions were not in absolutely true apposition, so that the ridge at the point of junction was very plain. But it was a good serviceable bone, and quite straight. He felt quite sure that the ulna had never been broken at all. He would not swear to it, because in surgery nothing is impossible; but to ask us to believe that the ulna was fractured in December, that the fragments were united at an angle in January, that the bone was again broken with such violence that it was feared the act would "tear the wrist asunder," and after all the ulna should be, as we found it, as smooth as the handle of a dinner knife, is putting too great a tax on our credulity.

REMARKS ON DR. A. A. HAMILTON'S MEDICO-LEGAL CASE.

Dr. J. A. G. HAMILTON felt sure every one present sincerely sympathised with Dr. Hamilton in the worry and annoyance he was subjected to over this case, and congratulated him on the clear and concise manner in which he had placed his case before the meeting that evening. It was a great pity this case was decided on a legal technicality. As Dr. Hamilton had not the opportunity of bringing his version of the case before the public, from what he knew of the case he had not the slightest doubt the evidence for the prosecution could have been completely upset. That he was denied this opportunity was more particularly to be regretted, as some of the evidence for the plaintiff was remarkable for the extraordinary surgical theories propounded as well as for the decided animus shown by some of the witnesses. He saw the boy's arm on September 18th, a few weeks before the case came into court, and about eight months after the fracture. The bones were in good position. On the radius, about 2 in. from the

joint, there was a well-marked ridge where the bone had been broken and where callus had been thrown out, but the ulna was in perfect position—not the smallest unevenness to be felt on any part of it. From his examination of the arm, he felt perfectly convinced that the radius only had been broken, and no injury had been caused to the ulna. The mother of the boy stated there had been a prominence on the ulna, and pointing to the styloid process, said that was the position of the irregularity on the ulna she complained of. According to the evidence of Dr. Ramsay Smith both bones were broken and had united at an angle, and in re-fracturing them so much violence was required that he was afraid of rupturing the wrist joint. Is it not imposing rather much on our credulity to ask us to believe that the ulna eight months before was set at an angle, re-fractured three weeks after with such marked violence in both cases necessarily, with considerable laceration of soft parts and periosteum, and that now it should be absolutely smooth, without a ridge or callus of any sort, although the seat of fracture of the radius is marked by a raised ridge or callus? Any surgeon of experience on examining the boy's arm now would, undoubtedly come to the conclusion that the radius and the radius only had been broken; besides, it is well known that one rarely, if ever, sees absolute perfect union in an ulna, especially in a young boy. The same witness tells us he does not expect to get callus in human bones. Has anyone ever seen a fractured bone in a boy's arm, close to a joint, where abundance of callus was not thrown out? We are again asked to believe that twenty-seven days after fracture the callus was so consolidated that great and dangerous violence was required to re-break it. The expert witnesses for the plaintiff lay great stress on the fact that there was not perfect pronation and supination at the end of three weeks, although the arm had been kept all the time in splints. Is it usual to find perfect pronation and supination as soon as a limb is taken out of splints? As I said before, the evidence of the experts produced by the prosecution was so remarkable, so conflicting and so entirely opposed to the teachings of every well-known author that it was a pity Dr. Hamilton's counsel had not an opportunity of cross-examining these experts and producing the writings of well-known authors to contradict their extraordinary surgical theories.

Drs. LONDON, HAYWARD and SWIFT also spoke, and sympathised with Dr. A. A. Hamilton on the way he had been treated.

Dr. POULTON moved, and Dr. J. A. G. HAMILTON seconded—"That it be a recommendation to the Council to take into consideration the formation of a Defence Association." Carried.

Dr. FISCHER showed—

I. A man, *æt.* 43, from whose right vocal cord he had removed by the galvano-cautery ten days previously, a tumour papillomatous in appearance, but fibrous in consistence, and upon which previous repeated applications of various astringents had made no appreciable effect. Voice is now practically normal, previously had been very harsh and easily tired, becoming after a time almost aphonic.

II. A young man, *æt.* 20, with a very large and prominent vertical spine on the left side of the nasal septum, which almost occluded the left nasal fossa in its whole length, and yet had never, to patient's belief, caused him any inconvenience—the patient sought advice for fracture of his nasal bones. His two brothers had also large septal spines, which Dr. Fischer had to remove, as they caused nasal obstruction.

III. A large fish bone, which he had removed from the larynx of a lady, *æt.* 46, who was brought to him by a fellow doctor, at whose house the lady had been dining, and who, with the laryngoscope, had seen the bone in the larynx, but had refrained from attempting its removal. The bone, which is strongly curved and 40 mm. in length, lay across the entry into the larynx, the free ends being tucked away under the base of the epiglottis. Till its removal the patient had repeated attacks of laryngeal spasm, and fully believed she was dying.

PATHOLOGICAL SPECIMENS.

Professor WATSON showed—

I. Three examples of elongated appendix, the first two of which, being thickened, present the slow insidious variety of appendicitis found in females.

When the cæcum is conical (foetal type) and the appendix runs due south, the entrance of faeces is inevitable, hypertrophy of the muscular coats results from the expulsive efforts and interstitial overgrowth from the continuous mechanical and chemical irritation of faeces which should be elsewhere. Acute symptoms may supervene.

In case I., virgin, *æt.* 27, the appendicitis had caused a circumscribed adhesive pelvi-peritonitis low down on the right side. (Dr. J. A. G. Hamilton.)

In case II., woman, *æt.* 30, the appendicitis co-existed with an old extinct bilateral salpingitis. (Dr. J. A. G. Hamilton.)

In case III. the appendix was imbedded in recent exudation with the right adnexa of a three para, *æt.* 28, with bilateral pyosalpinx of puerperal origin. (Dr. Evans.)

II. Fatty tumour the size of an adult kidney, it mimicked an inguinal omentocoele in a man about fifty, who, probably, wore a truss at one period of his life. I have seen a truss on a hydatid of the same region.

The point of special interest in this case is the presence of an old calcified lymphatic gland, possibly a sebaceous cyst the size of a large walnut in its substance. It was subcutaneous and not the ordinary lipocoele of the inguinal canal. (Dr. Shuter, Port Augusta.)

III. Two samples of thin walled cysts containing clear fluid: they co-existed with old adhesions of the pelvic viscera and simulated ovarian cysts, one from a white (Dr. Hamilton), the other from an aboriginal woman. (Dr. Chenery, Port Augusta.)

IV. Formaline kangaroo tendon as prepared by Mr. A. Wilson, of the Prince Alfred Hospital, Sydney, and used by Dr. Thring in much of his abdominal work. Dr. Hamilton repaired a cervix (Simon-Marcwald) ten days ago with it, and says it lasts much longer than raw tendon or even mildly chromicised tendon in a similar situation.

V. Photographs of the president and vice-presidents of the Gynaecological Section at the Brisbane Congress.

Dr. T. K. HAMILTON exhibited the following cases:—

1. *Injury to the Lens Capsule from a Foreign Body, which had apparently penetrated only the superficial layers of the Cornea.*—H.S., aged 20, came on September 9th, with a history of having been struck on left eye a week previously with a small chip of wood, and the eye has remained slightly weak since. On careful examination, a very small piece of the wood was discovered imbedded in the superficial layers of the cornea, and removed. The eye was quiet and there was no pain. Ten days after this he began to have pain which

soon became severe, and on his return he was found to have an opacity of the lens capsule with adhesion of the lower part of the pupil margin to this part, and some general iritis. The point of interest in the case is that injury to the lens from a foreign body which seemed so superficially situated in the cornea, should have resulted and that more than a week, at any rate, should have elapsed after the injury before the lens lesion appeared. There is now no mark of penetration to be seen through the posterior part of the cornea, nor is there any sign of a piece of the foreign body in the lens opacity.

II. *Corectopia, Staphylomata of the Sclerotic, Lachrymal Obstruction and Nasal Stenosis in a child, the subject of Inherited Syphilis.*—J.C., aged 7 years, female, came for examination of vision which was very defective. The child presented the usual physiognomy of such cases; nose, bridge somewhat sunken, and numerous cicatricial scars around the nostrils and the mouth, with a history of always having had weak and watery eyes. The condition of the eyes was as follows:—*Right*: Cornea clear, pupil slightly eccentric downwards and outwards, contracts to about 4 mm. on strong light, not quite round and rather inactive, does not dilate *ad maximam* with atropine but no posterior synechiae, and several trabeculae of persistent pupillary membrane; lens clear and in normal position; on the fundus extending downwards from the disc, there is a mass of slate-coloured retinal exudation, with two staphylomata of the sclerotic over each of which a retinal vessel passes, and at the margins of which the choroidal vessels seem to stop. *Left*: A central corneal parenchymatous opacity; pupil more displaced than the right and downwards and inwards, 4 mm. in size, not quite round and somewhat inactive; lens normal, media except cornea and fundus normal. Vision, retinoscopy gives + 6.00 D \bigcirc + 1.00 D ax. 60° both and with + 4.00 D $\frac{1}{2}$ °; and J 4 both. Both lachrymal ducts seem obstructed. *Nose*—*Right nostril*: A synechial band connects the inferior turbinated to the septum; *left*, a stenosis of inferior meatus leaving an opening large enough to admit only No. 6 catheter. The cicatricial obstruction in this latter nostril was freely divided, and a Bernay's aseptic sponge used to keep it open. The eye lesions occurred probably during foetal life, as there is no history of keratitis, etc., since birth. The eccentric displacement of the pupils is interesting as displacements in such cases are usually not downwards but upwards. Bernay's aseptic sponges make an admirable plug for the nose, far superior to ordinary gauze or other tampons. They are easy to insert and equally easy to withdraw, they exercise an equable pressure, and being aseptic, can be left *in situ* several days. These sponges supply what has been felt to be the desideratum in such cases, and are applicable to a great variety of other conditions, e.g., to arrest secondary hæmorrhage after intra-nasal operations, to form splints after the latter procedures, to apply cocaine prior to operation, to produce irritation and moisture in atrophic rhinitis, etc. A full account of their use is to be found in the *New York Medical Journal* of October 1st, 1898.

III. *Extreme Giddiness with Cerebral Irritation in a Case of Mastoid Suppuration where the Opening into the Tympanum was obstructed with Cholesteatoma and Granulation Tissue, and Immediate Relief from Operation.*—S. A. male, aged 17. History of chronic suppuration of both middle ears from childhood. First seen on September 13th. Ten days previous to this severe pain had come on with lessening of the discharge from the left middle ear. The pain soon became very intense and extended all over the head accompanied by very

great giddiness, so much so that the patient could scarcely stand erect. There was also considerable constitutional disturbance. The mastoid antrum was opened and found to contain a quantity of pus with cholesteatoma and granulations blocking up the opening into the tympanic cavity. These were all cleared out and the cavity packed with xeroform gauze. Immediate and permanent relief of the symptoms followed the operation. The extreme amount of giddiness was doubtless due to retention of pus in the antrum from obstruction of its outlet by the cholesteatoma, etc., and labyrinthine pressure thereby induced through the structures of the middle ear. This will explain the cause of the giddiness which was much greater than is usually present in mastoid suppuration *per se*.

IV. *Adenoma of the Tongue.*—W.W., male, aged 56. In April last began to have dysphagia and feeling of obstruction in the throat. For some years past has had recurrent swellings in various parts of the body, axillæ, groins, etc., and he has at present a tumour in the region of the left elbow joint. A large and smooth mass was found on the back of the tongue filling up the epiglottidean fossa and pressing against the epiglottis which can barely be seen with the mirror, nor could the interior of the larynx be seen. Dysphagia was the prominent symptom and there was occasionally some dyspnoea. Incisions were made into the growth in several places but no fluid or pus obtained, only very free hæmorrhage. This was followed by considerable relief and diminution in size of the growth. Some days subsequently a portion of the growth was removed (exhibited.) Dr Cavenagh-Mainwaring has examined the specimen and reports that it consists of a mass of gland tabules lined with columnar epithelium in a fibrous stroma and that the growth is most probably a tubular adenoma.

Adenomata of the Tongue are not common. Butlin in his "Tumours of the Tongue" records only eight cases, two of which he had in his own practice. He says these growths resemble thyroid tissue in structure, and may be connected with foetal remains of the lingual duct which seems to give some support to Bernay's and Bland Sutton's theories that they may be of the nature of accessory thyroid glands.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

CANTERBURY SECTION.

A GENERAL meeting was held on June 8th, 1899, Dr. R. W. Anderson (President) in the chair, and a large attendance of members.

Dr. ORCHARD exhibited two men suffering from well-marked aortic aneurism. These men had been "lumping" for many years at Port Lyttelton, and themselves attributed their trouble to the continued carrying of heavy weights—usually over 300 lb. In the discussion that followed it was evident that those present unanimously disapproved of "lumpers" or other bagmen being called upon to carry any weight over 200 lb., and it was agreed to approach the Chamber of Commerce with a strongly-worded protest to this effect; also to ask that body to take steps to have 200 lb. fixed as the maximum bag weight.

Dr. CAMPBELL read notes on "Ectopic Gestation," with details of a case of tubal mole.

A most interesting discussion followed.

The PRESIDENT gave particulars of a case in which abdominal section was performed, and the placenta was found to be attached to the fundus and fallopian tubes. Profuse hæmorrhage followed the at-

tempts to remove the placenta, and it was deemed advisable to plug the wound and leave matters as they were. A very good recovery resulted.

Dr. FENWICK mentioned a case recorded by Bland Sutton which turned out to be pregnancy in a uterus bicornia.

In answer to a question from Dr. Symes as to whether impregnation just before a menstrual period might not be more likely to produce ectopic gestation, Dr. CAMPBELL stated that it had not yet been proved that the mucous membrane lining the tubes followed that of the uterus in its changes.

A cordial vote of thanks was passed to Dr. Campbell for his interesting paper.

Dr. MANNING exhibited an eye removed after injury by a percussion cap. Probing did not disclose the presence of a foreign body, but sympathetic irritation shewing itself in the other eye, it was removed, and the percussion cap was found in the vitreous.

Dr. IRVING raised the question as to the mileage fees in the case of examination of lunatics, and Drs. Thomas and Symes were appointed to look into the matter and report at a future meeting.

Dr. IRVING stated that he had been in communication with the National Association for the prevention of consumption; and distributed among those present a number of pamphlets issued by that Association on the subject. He was strongly of opinion that we should move in the direction of forming a similar association. The matter was postponed for consideration at the next meeting.

A meeting was held on July 13th. Dr. Campbell in the chair, and a fair attendance of members.

The Sub-committee appointed to arrange matters connected with the Congress in February was asked to bring up an interim report at the next meeting.

Dr. IRVING read extracts from the *British Medical Journal*, and other papers, in reference to the prevention of tuberculosis, and it was agreed that it was the duty of the Section to take action in the matter. Dr. Irving was appointed our representative, and was asked to place himself in communication with the Agricultural and Pastoral Association in respect to the adequate inspection of dairy stock.

Dr. SYMES showed the heart of a man who recently committed suicide by drowning. He was a carpenter by trade, middle-aged, and a heavy drinker. The heart weighed sixteen ounces, and presented signs of marked infiltration and probably degeneration. The valves and aorta were thickened out, but not atheromatous. Dr. Symes stated that the apices of the lungs showed tuberculous nodules, which he had frequently seen in cases of alcoholism. He had also noticed that heart disease and suicide were frequently associated.

Dr. FENWICK exhibited a cast of a kidney, where there had been sudden suppression of urine. The left kidney was non-operative and the ureter a fibrous cord.

An ordinary monthly meeting was held on August 10th, the President in the chair, and a large attendance of members.

The Sub-committee brought up an interim report of what had been done in the matter of the February Congress. A good deal of work had been arranged, of a preliminary character, and the affair was considered to be well under way.

The HONORARY SECRETARY reported that the President of the Chamber of Commerce had brought the matter of carrying heavy sacks before his Association, and a resolution had been passed drawing the attention

of the Government to the subject. An editorial had also appeared in the *Lyttelton Times*, expressing strong approval of the action taken by the Section and the Chamber of Commerce.

Dr. GANE read notes of a case in which the breasts were suddenly and consecutively attacked with acute pain during the puerperal period. There was pyrexia and some signs of cerebral disturbance, indicating an embolic origin. The recovery was speedy. Dr. CAMPBELL mentioned a case in which the patient had apparently recovered after confinement, and suddenly collapsed when being put to bed. Dr. R. W. ANDERSON recollected two instances of embolus with fatal results. Dr. MORTON ANDERSON gave details of a ruptured heart after confinement.

Dr. FENWICK read a paper on a "Case of Suppression of Urine." The patient had been ailing for some months, and after several attacks of acute abdominal pain, entire suppression of urine supervened for five days. Cystoscopic examination showed that both ureters were blocked. An operation was decided upon, but postponed on the patient passing a few ounces. Although 62 ounces were voided during the next 48 hours, yet the next day only produced 3 ounces, and the abdomen was opened, when a large mass of new growth, involving the mesentery, was found to be pressing on the ureters. This was removed, and 169 ounces were passed in 24 hours, and an average of 110 ounces during the next seven days, when there was again diminution, and the patient died on the eleventh day after operation. In a second case—a man aged 68—retention was produced by the pressure of a large abscess (perineal) on the urethra. Recovery after operation. In a third, it was due to a tight stricture. Here perineal section afforded decided relief. Referring to the second case in which the abscess had stripped the peritoneum from the bladder, and extended without opening into the rectum. Dr. Campbell said it recalled cases of abscess in the broad ligaments in which there was burrowing instead of opening into the adjacent organs.

A meeting was held on September 13th. Dr. Anderson (president) in the chair, and an unusually large attendance of members.

Most of the evening was spent in the consideration of two medico-ethical cases.

Dr. CAMPBELL was appointed to represent the Section at the next Council Meeting, held in Wellington.

A paper cutting was read showing that the Premier had been asked as to whether he intended to take any action in the matter of the weight of wheat and other sacks. He replied that he fully recognised the risk ran by men carrying such heavy weights, and while of opinion that it was more a subject for the Chambers of Commerce to deal with, the Government would give every assistance towards bringing about the reform suggested by the Section.

OTAGO SECTION.

Meeting held August 30th, 1899. Present: Dr. Barnett (President), Drs. G. P. Brown, Burt, Batchelor, Closs, Colquhoun, Hodges, Hendry, Hocken, Marshall Macdonald, McKellar, Riley, Roberts, and Smith.

Dr. Blomfield was present as a visitor.

Dr. COLQUHOUN reported that satisfactory arrangements had been made with the City Council regarding the distribution of leaflets dealing with the prevention of tuberculosis.

Dr. ROBERTS read a paper on the "Treatment of Infective Diseases." He pointed out that drugs in

most instances were of slight value, except in the treatment of symptoms. The most rational method of dealing with such diseases was by the administration of antitoxins, and he gave an interesting summary of what has been done so far in this new departure in the domain of therapeutics.

The paper gave rise to an interesting discussion, many of the speakers deprecating the condemnation of drugs like mercury, quinine, salicylates, &c., which in certain infective diseases do appear to exert a specific effect; although all agreed in the main with Dr. Roberts' well-argued contentions.

Dr. BARNETT was of the opinion that antitoxins should be administered in far larger or more concentrated doses than was at present the rule.

Meeting held September 27th, 1899. Present: Dr. Closs (Vice-President, in the chair), Drs. Batchelor, G. P. Brown, Colquhoun, Hocken, McKellar, Macpherson, Marshall, Macdonald, O'Neill and Roberts.

An ethical dispute arising between two practitioners in the district of Otautau was considered and referred to the Standing Committee.

Dr. MACPHERSON read a paper on "A Case of Obscure Nervous Disease," and showed the patient, a little girl who had some months previously developed marked cerebral symptoms suggesting either tubercular meningitis or cerebral tumour. The case became so bad that a very unfavourable prognosis was given, but, to Dr. Macpherson's surprise, the patient began to improve and completely recovered her health, but has remained quite blind. The case was discussed by several of the members, and proved a very interesting and instructive problem for solution.

Dr. MACPHERSON also showed a large phosphatic calculus that had been passed per urethram in a female patient.

Dr. COLQUHOUN showed microscopic preparations of blood from a case of malaria. The laveran bodies were beautifully seen.

Dr. CLOSS showed a tongue which he had removed from an old man *æt.* 72, who had suffered in his younger days from syphilis, and in whom cancer had subsequently developed. There was clear evidence of both syphilitic and malignant infiltration of the tongue and adjacent tissues.

Dr. CLOSS also showed an enlarged prostate, successfully removed by the transverse perineal incision. The patient had been operated on previously by the suprapubic operation, but the symptoms had recurred.

Another enlarged prostate removed by Dr. Closs by the perineal route was also shown, and in this case there was a calculus present in the bladder. This case also had been previously operated upon by the suprapubic method.

Dr. BATCHELOR showed specimens from an ectopic gestation in which there had been tremendous hæmorrhage, but the patient had not shown the usual signs of collapse.

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LETTERS TO THE EDITOR.

ADELAIDE HOSPITAL TREATMENT OF DIPH- THERIA—INFORMATION WANTED.

(To the Editor of the Australasian Medical Gazette.)

SIR,—In the July number of the *Gazette*, Dr. Swift's presidential address to the South Australian Branch of the British Medical Association contains some remarks concerning a treatment of diphtheria employed at the Adelaide Hospital. Dr. Ramsay Smith replies in the August number, and invites those interested to come to the Hospital and see the method in work. Would it be too much to ask Dr. Ramsay Smith to describe his method in the pages of the *Gazette* for the benefit of those who are unable to visit Adelaide? I am sure the "bush-doctor," who cannot procure antitoxin just when it is wanted and cannot keep an ample stock for fear of deterioration, would be thankful to know of reliable remedies to be found in the British Pharmacopœia.

I am, yours truly,
IGNORAMUS.

TREATMENT BY SUPER-HEATED AIR.

(To the Editor of the Australasian Medical Gazette.)

SIR,—The thanks of the profession are due to Dr. Willis for bringing treatment by super-heated air prominently before the medical profession *vide* August and September issues of the *Australasian Medical Gazette*, pp. 327-331, and 376-380. Over three years ago I showed a hot-air bath at one of the meetings of the British Medical Association, and from that time to this have had a good many cases under my care. I have not obtained universal success in my cases, the best effects had been noticeable in traumatism, gonorrhœa, and muscular rheumatism. In arthritis deformans and in chronic rheumatism success has been variable. In sciatica, although the pain has been lessened, cure has seldom occurred by this means alone. Dr. Willis seldom seems to employ hot air above 250°, and the patient's temperature rarely seems to rise to 100°. My patients frequently had a temperature over 100°, even at low degrees of heat, and in some cases no good has been effected at a lower temperature of air than 320°. By means of a wooden cradle, a thick blanket, and a gas jet temperature ranging from 220° to 270° can easily be employed. Care must be taken to have ventilating shafts permitting the ingress of fresh air at the lower part and the egress of hot air at the upper part of the apparatus. It will be also necessary to provide non-conducting rests for the limb, and a shield to protect it from the flame. With a spirit lamp of large size, and the exercise of much patience, a temperature over 200° may be easily produced. Expensive baths are not accessible to all, and a home-made article can thus be made to serve its purpose in a large number of cases.—I am, yours truly,
W. KENT-HUGHES, M.B. Lond
Melbourne.

MICROSCOPES, compensation, one Richert stand with Zeiss lens, getting all the advantages of a perfect microscope at a third of the usual cost. S. Mills. 168 Pyrmont Bridge Road, Glebe.

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Contributors will have to pay the cost of illustrations accompanying their articles.

The Australasian Medical Gazette and the British Medical Journal are supplied to all Financial Members of the New South Wales, South Australian, and Victorian Branches Free of Cost.

Subscriptions (£2 2s. per annum) should be forwarded to the respective Branch Treasurers as below:—

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THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.:
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
E. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; J. B. GUNSON,
ADELAIDE, S.A.; AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH NOVEMBER, 1899.

EDITORIALS.

NEW SOUTH WALES ARMY MEDICAL CORPS AND THE BOER WAR.

THE offer by New South Wales of a Field Hospital with half a Bearer Company fully equipped for service in South Africa with the Imperial troops, was "much appreciated and gladly accepted" by the British Government. Such a noble and altogether humanitarian offer cannot be too highly praised by friend or foe.

The Government and people of New South Wales are to be congratulated upon possessing

such an efficient Army Medical Service as they have. We believe we are correct in stating that outside the mother countries and India there is no other British community that could put such an efficient medical unit in the field, and consequently that could make such a generous offer. As will be seen upon reference to our "Military Intelligence" column (see page 517), the New South Wales unit consists of eight officers and eighty non-commissioned officers and men, with transport for all the equipment necessary for a field hospital, officers, and half Bearer Company. In one particular, viz., that of transport, the New South Wales unit is superior to similar bodies in the Imperial army. The Imperial Medical Corps depends for its transport upon the Army Transport Corps, whereas the New South Wales Corps has this necessary work done by its own transport service. The unit is so fully prepared as regards officers, men, equipment, and transport, that it is ready, to at once proceed to its work upon debarkation at Port Elizabeth or elsewhere.

Very great praise is due to Colonel W. D. C. Williams, the principal medical officer of the New South Wales army, for the standard of efficiency of the army medical service of that colony. It is due to his powers of organisation, and his constant cheerful application, that everything was in readiness at the shortest notice. The medical officers accompanying Colonel Williams to South Africa, Drs. Fiaschi, Roth, Green, Perkins, Martin, Edwards, McDonell, and that of similar medical volunteers from other colonies, viz.: Dr. Hopkins, Vic., Dr. Toll, S.A., and others whose names have not been forwarded to us have shown great self-sacrifice in volunteering for service abroad, they deserve great praise, seeing that such action will take them away from their extensive and lucrative practices. Their offer for service abroad constitutes another of those numerous instances of devotion to duty so often exhibited by members of our profession. We are sure that both officers and men will perform good work. The risks to the medical officers and ambulance bearers in war are always great, but in this war they are very great, for it has been, we regret to say, stated by the newspapers that it is officially reported that the Boers have fired upon a red-cross flag, also upon ambulances, and a hospital.

We wish an honourable career and a safe and speedy return to the New South Wales medical staff and their men, as well as all others from the different colonies.

THE FIFTH INTERCOLONIAL MEDICAL CONGRESS.

THE triennial gathering of the medical profession of Australia, which has now become a regular and much appreciated fixture, took place at Brisbane during the week commencing September 18th, 1899. Like its four predecessors, the fifth Congress must be regarded as a decided success. The warm-hearted people of Brisbane, Toowoomba and adjacent districts gave the visitors a royal welcome, showed them all the manifold attractions of town and country, and showered their hospitalities upon them until the oft-repeated junketing became a menace to even the stoutest digestions. In every possible way they tried to make the visitors' stay an enjoyable one, and they succeeded. The Governor, Lord Lamington, and Lady Lamington, took an active interest in the affairs of the Congress, and were present at many of the functions in addition to giving a garden party on their own account. Dr. John Thomson made an excellent president; he was always working, always genial, always the right man in the right place. His presidential address was a happy effort, enjoyed by all who heard it, and his superintendence of the daily work of the Congress was marked by a fortuitous blending of firmness, tact and good humour. Dr. Wilton Love, the general secretary, worked like a galley slave, and although he must have been completely weary, he kept cheery to the end, and managed the complex machinery of the Congress in a manner that earned him the warm gratitude of every member present. Both the president and the general secretary, too, were conspicuous for their liberal entertainment of visitors, and amongst others who should be mentioned in this connection were the Premier of Queensland, who gave a river picnic in the Government steamer "Lucinda"; Dr. and Mrs. Hardie, who gave an illuminated garden fête; Rev. T. and Mrs. Nisbett, who gave a conversazione; Mrs. Pinnock, who gave afternoon tea at the Art Society's gallery; and Drs. Lockhart Gibson, Bancroft, Jefferis Turner, Hopkins, Falkner, Taylor, and many others who gave breakfasts, luncheons, or dinners, and in other ways devoted their time and energies to the providing of pleasure for their guests.

Numerically the Congress compared well with previous meetings; 160 members signed the roll at Brisbane, and these included representatives of light and leading in the medical world from all the Australian Colonies except Western Australia.

The practical results of the Congress are as usual chiefly visible in the public health section's transactions, but the eye section, under the able presidency of Dr. Lindo Ferguson, was also conspicuous in bringing forward at the final meeting of the Congress definite resolutions concerning the education of children, especially female children at the trying age of puberty. One afternoon was devoted to an important discussion on the relation of the profession to Friendly Societies, and a resolution was passed recommending the various defence associations throughout the colonies to take the matter up and endeavour to bring about an improvement upon the present state of affairs.

The work in the sections was not quite as thorough as it might have been—the usual experience of medical congresses, granted that one of the most important factors contributing to the success and to the scientific value of a congress is the opportunity afforded to men to associate and converse with one another, interchanging ideas, measuring their knowledge, and so forth; still there is undoubtedly a disproportion between the social functions and the practical work of the Congress. Something could be done to make the sectional work more useful and more attractive. To begin with, members would gladly give up a portion of two, or possibly three, afternoons to sectional work, in addition to what is customary in the mornings. There is no occasion to devote the whole afternoon to a garden party or "at home."

Again, although the papers read at the Brisbane Congress were generally of a high order of merit, it would conduce to a still higher standard if papers were sent in previously to the meeting, so that they might be examined by a committee, who would select the best or most appropriate for preference in reading. The majority of papers are shelved for lack of time. They are buried for ever in the little-read pages of the Congress transactions. Now it occasionally has happened that much of the time of the sections is taken up in the reading and discussing of papers of inferior merit, while papers of sterling value are shelved. It should, of course, be the rule that members who attend the Congress should have preference in the reading of papers over those who have merely sent their contributions; and members should not be allowed to read more than one paper if there be others present who have had no opportunity of reading any. These rules were not in operation at Brisbane, at any rate in the surgical section, and some not

unnatural feeling of irritation was thereby caused.

In connection with the museum of exhibits, there was unfortunately a lamentable piece of forgetfulness which led to the utter neglect of a very carefully prepared, valuable and instructive set of models of the bladder and urethra, showing various abnormalities as revealed by the cystoscope and urethroscope. These models had been sent by Dr. Clennell Fenwick, of Christchurch, N.Z. (a brother of Mr. Hurry Fenwick), and he must have taken a great deal of time and trouble in their preparation. It is greatly to be regretted that they were only unpacked from their boxes at the very close of the Congress, when almost all the members had departed.

It may seem perhaps unfair to cavil at the management of the Congress in this way, for really it was a most successful meeting. Our Queensland friends will, however, take these remarks in good part, for it will take very good management indeed to do things much better than they were done at Brisbane.

A PUBLIC FREE DISPENSARY FOR SYDNEY.

LAST month (page 467) we discussed a portion of the fourth report of the Royal Commission on Public Charities so far as it concerned the hospitals of New South Wales. We now proceed to consider recommendation No. 13 in that report, which reads as follows:—

"That the Regent-street dispensary should be discontinued, and the Government grant cease, and that Government assistance should be given in aid of a free dispensary on the lines of such institutions in the mother country, from which patients in destitute circumstances could be treated, either at the institution or at their own homes, by a competent medical staff, and receive the necessary medicines, etc."

Some very voluminous evidence has been taken upon this question from various medical men who have had extensive experience in hospital work, club, and private practice. The questions now to be considered are as follows:—

- "1. How far will this scheme economise such funds as are now expended upon patients who could have been treated otherwise than in public hospitals?
- "2. What safeguards shall be provided to ensure that proper recipients of this charity will be treated?
- "3. The *personnel* of the staff of this dispensary."

With regard to the first, there are, no doubt, numerous individuals in indigent circumstances who, when sick or suffering from the result of an accident, would prefer being treated at their own homes to becoming the inmates of hospitals. The state of their finances are such that, even were a good-natured practitioner to render gratuitous services, the cost of the medicines prescribed would be felt as an intolerable burden. This is the class whose wants would be supplied by such a scheme, and in treating them at their homes there would be an undoubted saving of the cost of their maintenance at the hospitals.

This leads up to the consideration of question No. 2—as to the proper means of safeguarding the public interests by providing that only suitable subjects should become the recipients of this charity. No doubt the gross abuse of hospital charity is due to the fact that sufficient care has not been taken by appointing a staff of officers whose duty would be to personally inquire into the means of every person seeking hospital relief as either indoor or outdoor patients. If possible, it would be a judicious plan to make each person seeking such relief for self or family sign a statutory declaration regarding his means, which, if on investigation should prove to be false, would form the basis of a prosecution for fraud. The salary paid to such investigators would constitute a saving if placed against the money expended upon the numerous unsuitable subjects for hospital assistance who would by this means be prevented from availing themselves of money intended for charitable use.

No. 3: With regard to the *personnel* of the dispensary, somewhat similar lines could be followed as refers to the appointment of a hospital staff, but it would be wise that the officials organised for this dispensary work should not be members of any hospital medical staff. A plurality of appointments is not congenial to the welfare of the profession.

We venture to suggest that the whole working machinery of the outdoor dispensary be placed under the supervision of a medical practitioner of experience in hospital work and general practice, who shall be considered the responsible head of the department. Associated with him an honorary staff could be nominated, members of which could be summoned for consultation in extreme and urgent cases. The working staff might consist of junior members of the profession, whose services, for a fixed salary, would be available for dispensary, midwifery, or visiting purposes.

A central dépôt should be maintained,

capable of affording residence for the active staff, dispensers, and possibly a porter and matron, with a complete equipment of drugs, splints, bandages, and other appliances necessary for minor operations.

This merely suggests the general outline of a scheme, concerning which matters of detail could be subsequently arranged.

AN ADELAIDE MEDICO-LEGAL CASE.

WE wish to draw the attention of the well-meaning members of the medical profession to the medico-legal case reported by Dr. A. A. Hamilton, of Adelaide S.A., on page 501. To those who will carefully study the report of this case as furnished by the writer, it will be evident that Dr. Hamilton has very fairly stated a case which is entirely in his favour. The medico-legal aspect of this case is of infinite importance to the profession in these colonies, not only as regards the relationship that exists between club doctors and the members of friendly societies whom they contract to attend, but also to those in general practice. It is much to be regretted that, in such an important case, the evidence which could have been supplied by the Röntgen rays was not produced before the court.

PUBLIC HEALTH.

At a meeting of the Hobart Central Board of Health, held on September 22nd, Dr. Crouch drew attention to a case of a woman who was discharged from the hospital as incurable and was subsequently attended by him as Government Medical Officer. She died on the 14th September, and was buried without charge, but the death had not been registered owing to the absence of a medical certificate. The woman died and was buried between two of his visits. It was a serious thing that anyone could be buried without a certificate of death by a medical man. The secretary was instructed to inquire into the matter.

The White Star S.S. "Afric" arrived in Sydney on the 22th October carrying 128 passengers and a crew of 96. At Capetown 125 passengers were taken on board, and she sailed with a clean bill of health. On 2nd October, the day after leaving Capetown, Mr. Bodyscombe reported himself ill. He had arrived from Johannesburg immediately before. He was not isolated that day, though he had some suspicious pimples on the face. On 3rd October he was isolated, together with a steward. On the 4th it became clear that his illness was smallpox. On 14th October Steward Wakeling, on 15th Mr. Boyd, a passenger, on the 16th Stewards Cullington and Smee, Mr. Manhuer and Mr. Hill, on the 17th Mr. Thomas, on the 18th Mr. Blakey, on the 19th Messrs. Morton and White and Mrs. Lloyd, on the 20th Messrs. Eason and Noakes fell ill. Ten of the passengers affected occupied cabins on the same flat. Four of them were berthed in the same cabin with Mr. Bodyscombe, while the remaining passenger affected

was waited on at table by one of the stewards who subsequently fell ill. The outbreak was entirely confined to the berths referred to. Dr. Bunt, the ship's surgeon, proceeded to re-vaccinate all hands with the supply of vaccine carried. He had only about 15 successes. The patients as they fell ill were isolated in the ample hospital accommodation. At Albany 18 passengers were landed in quarantine, but no sick were taken. At Adelaide 31 passengers were landed, of whom 11 were sick, and 3 stewards who were ill. At Adelaide a medical officer from the Central Board of Health, Victoria, boarded the ship with a fresh supply of vaccine, and, together with the ship's surgeon, proceeded to revaccinate all hands. At the same time the hospital cabins occupied by the sick passengers were disinfected, cleaned, and re-painted. On arrival at Melbourne 97 passengers and 5 stewards were landed, all well. On inspection at Sydney no cases of suspicious illness were detected, and passengers and their luggage were landed during the day. The passengers and the crew were placed in quarantine, and the ship had the usual fumigation.

During the month of September there were 3 deaths from influenza in Sydney, and 10 in Melbourne. There were 3 from typhoid fever in Sydney. The deaths from pneumonia numbered 19 in Sydney, 36 in Melbourne, 9 in Brisbane, 12 in Ballarat, 3 in Hobart.

UNIVERSITY INTELLIGENCE.

SYDNEY UNIVERSITY.

At the monthly meeting of the Senate, on November 7th, the Chancellor (Dr. H. N. MacLaurin) presiding, the following business was transacted:—

On the motion of Professor Stuart, seconded by the Hon. Sir Arthur Benwick, it was resolved that Dr. H. V. Critchley Hinder be appointed lecturer in clinical surgery in place of the late Dr. McAllister.

On the recommendation of the Dean of the Faculty of Medicine, the following examiners were appointed to act with the professors and lecturers in the conduct of the forthcoming annual examinations of students:—Anatomy, Dr. A. E. Mills; physiology, Dr. E. C. Stirling; pathology, Dr. S. Jamieson; materia medica, Dr. A. Watson Munro; medicine, Hon. Dr. MacKellar; surgery, Dr. W. Chisholm; midwifery, Dr. S. H. McCulloch; gynecology, Dr. F. Barrington; clinical medicine, Dr. A. Shewen; clinical surgery, Dr. Steer Bowser; psychological medicine, Dr. Eric Sinclair; ophthalmic medicine and surgery, Dr. Odillo Maher; medical jurisprudence and public health, Dr. Ashburton Thompson.

MILITARY INTELLIGENCE.

THE BOER WAR.

MEDICAL OFFICERS FROM AUSTRALASIA.

NEW SOUTH WALES.—The offer of the New South Wales Army Medical Corps to provide a Half-bearer Company and a Field Hospital for the Transvaal having been accepted the Contingent left Sydney in s.s. "Kent" on October 28th. The following officers proceeded with the Contingent:—Colonel W. D. C. Williams, Major T. H. Fiaschi, Captain R. E. Roth, Captain T. A. Green, Captain A. E. Perkins, Lieutenant T. M. Martin. Lieutenant C. A. Edwards accompanied the troops on the s.s. "Aberdeen," which left Sydney on November 3rd, and Lieutenant E. P. McDonnell those on board

the ss. "Langton Grange," which sailed from Newcastle. The equipment of the corps includes a complete field hospital of fifty beds, and five large ambulance waggons, eight transport carts, two water-carts, and two Maltese carts. Fifty-three horses were taken to draw the vehicles and for officers' use.

The Governor, with the advice of the Executive Council, has been pleased to approve of the following appointments, promotions, etc., in the New South Wales military forces, viz.:—New South Wales Army Medical Corps (Volunteer Establishment).—Captain Thomas Henry Fiaschi, to have the temporary rank of major whilst serving in South Africa. Lieutenant James Brown Crabbe is transferred to the reserve of officers; Harold Knowles Bean, gentleman, M.D., C.M., Univ. Edin., to be lieutenant. Reserve of Officers.—Lieutenant James Brown Crabbe, from New South Wales Army Medical Corps (Volunteer Establishment), to be lieutenant. During the absence of Colonel Williams with the New South Wales Contingent in South Africa, Lieutenant-Colonel Vandeleur Kelly, New South Wales Army Medical Corps, will act as Principal Medical Officer.

VICTORIAN CONTINGENT.—W. F. Hopkins, B.A. Adel., M.B. Melb., of Stawell, Vic.

SOUTH AUSTRALIAN CONTINGENT.—Major J. T. Toll, M.R.C.S. (Health officer of Port Adelaide), with rank as Captain.

QUEENSLAND CONTINGENT. WESTERN AUSTRALIAN CONTINGENT. TASMANIAN CONTINGENT. NEW ZEALAND CONTINGENT. (Names in a future issue.)

NEW ZEALAND.—His Excellency the Governor has been pleased to accept the resignation of the commission held by the undermentioned officer:—New Zealand Volunteer Medical Staff.—Surgeon-Major James Hudson (attached to Nelson Rifle Volunteers). Date of resignation, 16th September, 1899.

OBITUARY.

FRANCIS CHEETHAM, L. & L.M., B.C.P. Edin. 1881, died at Scottsdale, Tas., in September.

ARTHUR CROSBEE DIXEY, L.S.A. Lond. 1881, M.R.C.P. Edin. 1882, L.R.C.S. Edin. 1881, of St. Helen's Tasmania, is dead.

CHARLES BEAMISH DUGAN, L.R.C.P. & S. Edin. 1880, of Carisbrook, and formerly of Richmond, Vic., died recently.

ROBERT ROBERTSON, L. 1852, F. 1878, F.P.S. Glas., died in Adelaide on October 31st. Dr. Robertson had practised in the Australian colonies for nearly forty years.

RICHARD SIDES, M.B. Melb. 1877, of Bourke, N.S.W., died on November 4th.

MEDICO-LEGAL.

MEDICAL MAGISTRATES.—His Excellency the Governor of New South Wales has been pleased to appoint the following members of the medical profession as Justices of the Peace for New South Wales:—

Bennet, Francis Alexander, M.D., etc., 26 College-street, Sydney.

Caspersonn, Edward, M.D. U.S.A., of Wyalong. Clune, Thomas Benedict, L.R.C.S. Irel., etc., Crystal-street, Petersham.

Cocks, Cambridge Cary, M.D., of Wentworth.

Graham, James, M.D., etc., of Liverpool-street, Sydney.

Harris, Henry Louis, M.B., etc., of Tamworth.

Hawthorne, Alfred Wynter, M.D., etc., of Carcoar.

Hickey, Evan Lewis, M.D., etc., of Nyngan.

Higgins, Frederick Charles, M.B., of Walgett. Kennedy, John William, F.R.C.S. Irel., etc., of Hay.

Lyden, Michael John, M.D., of College-street, Sydney.

Mackay, George Archibald Innes, L.R.C.P., etc., of Maclean.

M'Donagh, John Michael, M.D., etc., of Macquarie-street, Sydney.

MacPherson, John, M.B., etc. Syd., of Glen Innes.

Merrifield, Sydney Sargent, M.R.C.S. Eng., of Bombala.

Miles, George Edward, L.R.C.P. Lond., M.R.C.S. Eng., of Rydalmere.

Perkins, Alfred Edward, M.B. Syd., etc., of "Blair Athol," Marrickville.

Rygate, Charles Daniel Hartley, M.R.C.S. Eng., etc., of Wellington.

Also Thomas Dun Bertram, Esq., J.P., M.B., has been appointed a member of the Licensing Court, district of Coonamble, N.S.W.

MEDICAL ETHICS.

Save Me from my Friend!—A New South Wales western district newspaper publishes the following indirect form of advertisement:—"A SEVERE STRAIN.—Mr. —, a butcher, of — met with an accident on Monday from which he sustained severe internal injuries. He was carrying a quarter of beef at the time, and by some means strained himself. The pain he suffered was intense, and to have it allayed he journeyed to —, where he was attended to with good results by Dr. —." We sympathise with the medical gentleman in question.

CHANGE OF ADDRESS, ETC.

BUTCHART, Dr. J. E., has removed from Avenel, Vic., and has commenced practice at Oatlands, Tas.

CLARKE, Dr. P. J., has removed from Caulfield to Oakleigh, Vic.

COPE, Dr. H. Roger, late Resident Medical Officer at St. Vincent's Hospital, has commenced practice at Henson-street, Summer Hill, near Sydney.

DAVIES, Dr. A. J., late of Darlington, Sydney, has settled at Beaudesert, Q.

ECLES, Dr. H. D., a recent arrival, has commenced practice at Monymay, N.Z.

GREGG, Dr. JAS., late of Wedderburn, has commenced practice at Mansfield, Vic.

HAWKES, Dr. E. S., has returned from his tour, and resumed practice at Rockhampton.

HOPKINS, Dr. W. F., recently of Stawell, Vic., has gone with the Victorian Contingent to South Africa.

JONES, Dr. P. SYDNEY, is returning to Sydney in the R.M.S. "Omrah" (which is due in Sydney on 25th inst.) after an absence of nearly two years in the old country. His medical *compères* will gladly welcome him back.

LIDDLE, Dr. P. H., has removed from Mansfield to Elmore, Vic.

MCMASTER, Dr. H. H., has commenced practice at Roseberry, West Coast, Tas.

MUNRO, Dr. W. J., late of the Glebe, has returned from Europe, and commenced practice at 213 Macquarie-street, Sydney, specialising in Diseases of the Skin and Genito-Urinary Diseases.

PARSONS, Dr. W., has commenced practice at Avenel, Vic.

RENNIE, Dr. GEO. E., is returning in the R.M.S. "Omrah," after an absence of about fifteen months.

He will re-commence practice at 40 College-street, Sydney.

RUSSELL, Dr. B., has left Rotorua, N.Z., for Maitland, N.S.W.

SPARK, Dr. E. J. S., late of the General Hospital, Hobart, has removed to Stockton, N.S.W.

THOMAS, Dr. F. M., late of Burnie, Tas., has gone to Brisbane Hospital.

THOMPSON, Dr. J. S., has left South Yarra Vic., for Perth, W.A.

THORP, Dr. C. G., is acting as *locum tenens* for Dr. Allnutt, of Richmond, Tas., absent in England.

TOLL, Dr. J. T., recently Health Officer at Port Adelaide, has gone with the South Australian Contingent to South Africa.

VAN SOMEREN, Dr. G. A., recently of Orange, has commenced practice at Mosman, near Sydney.

WATSON, Dr. J. WALLACE, has removed from Captain's Flat to Adelong, N.S.W.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced :

Bartlett, Dr. G., to be a member of Irwin District Board of Education, W.A.

Clarke, F. G., L.R.C.P. &c., to be Officer of Health for Shire of Fern-tree Gully, Vic., *vice* Dr. D. Simpson, resigned.

Franklin, T. E., L.R.C.P. & S. Edin., &c., to be Visiting Surgeon to the Parramatta Gaol, N.S.W., *vice* Dr. W. B. Violette.

Goode, A., M.B., &c., to be a Public Vaccinator for South Australia.

Halford, A. C. F., M.D., &c., to be Medical Officer at Clermont, Q., *vice* Dr. E. N. Scott, resigned.

Hamilton, T. K., M.D., &c., to be President of the Medical Board of South Australia.

Harrison, Dr. W. H., to be Medical Officer to attend Destitute Poor and Aborigines at Georgetown, S.A.

Heyward, Dr. W. B., to be House Surgeon of Launceston Hospital, Tas.

London, A. A., M.D., &c., to be a member of the Medical Board of South Australia, *vice* Dr. Paterson, resigned.

Liddle, P. H., M.B., &c., to be Officer of Health for Shire of Huntly, Vic., *vice* Dr. W. T. Halse, resigned.

Macgowan, E. T., M.B. Melb., to be House Surgeon at the General Hospital, Hobart.

Ramsey, J. E., M.B., &c., to be Public Vaccinator at Mount Magnet, W.A.

MEDICAL RESIGNATION.

The following Medical Resignation is announced :

Williams, T. O., L. & L.M.R.C.P. Edin., L.F.P.S. Glasg., as Resident Surgeon, the Hospital, Thames, Prov. Auckland, N.Z.

REVIEWS.

THE ANATOMY OF THE CENTRAL NERVOUS SYSTEM OF MAN AND OF VERTEBRATES IN GENERAL. By Professor Ludwig Edinger, M.D. Translated from the fifth German edition by Winfield S. Hall, P.H.D., M.D., Professor of Physiology in the North-western University Medical School, Chicago; assisted by Philo Leon Holland, M.D., and Edward P. Carlton, B.S. Illustrated with 258 engravings. Philadelphia, New York, Chicago: The F. A. Davis Company, publishers, 1899. Sydney: L. Bruck.

This is the fifth edition of what originally was a small book upon a subject which had not previously been comprehensively treated: The comparative morphology of the central nervous system. This book was originally printed in the German language, and its translation now before us is the first effort by a German, American, or English writer to give to the

profession a systematic and thorough treatise on this subject. While translations have been made of one or two smaller books, the physician who has hitherto been studying this important branch of anatomy has had to make a review of endless monographs and articles in foreign literature. Diseases of the central nervous system are becoming more and more frequently recognised in general practice, and necessity compels constant study and reference to be made to their anatomy. While writers upon diseases of other parts and organs of the body may safely infer that their readers have been sufficiently instructed in the relative anatomy, authors of books on neurology have to contend with the fact that the final details of their subject are generally considered in a cursory way, wholly insufficient for the necessary information demanded by their readers. Dr. Edinger, in the production of the fifth edition of this book, has supplied a want that has been felt by the general practitioner in medicine, and the publishers have in a most creditable manner printed and thoroughly illustrated it in a style that fully harmonises with its scientific value.

THE GROSS AND MINUTE ANATOMY OF THE CENTRAL NERVOUS SYSTEM. By H. C. Gordinier, A.M., M.D., Professor of Physiology and of the Anatomy of the Nervous System in the Albany Medical College; Member American Neurological Association. With 48 full-page plates and 213 other illustrations, many of which are printed in colours, a large number from original sources. Philadelphia: P. Blakiston's Sons & Co., 1899. Sydney: L. Bruck. Price, 26s.

This admirable work has been written and compiled with the view of filling the vacancy due to the absence of a complete work in English on the Anatomy of the Central Nervous System, in the form of a systematic text-book upon a most difficult subject, couched in a concise but comprehensive manner. This book is intended to meet the needs not only of medical students, but also the general practitioner and the clinician in the difficult problems of associating symptoms of nervous diseases with anatomical facts. Originally conceived and compiled for a course of lectures to his students, the author has now amplified, re-arranged and illustrated his views upon this subject, which he has strengthened by references from other writers, and acknowledges his indebtedness to the magnificent works of Cajal, Edinger, Flatau, Déjerine, His, Jakob, Koelliker, Lenhossek Quain, Retzius, Starr, Van Gehuchten, Wernicke, and others. We strongly recommend this work to those interested in the subject, and feel assured that the author's labours will be helpful to many, and may possibly clear up some obscure questions which have hitherto puzzled numerous earnest practitioners in medicine. The book is very clearly printed in readable type, with photogravures, micro-photographs and coloured prints.

NERVOUS AND MENTAL DISEASES. By Archibald Church, M.D., Professor of Clinical Neurology in the Chicago Medical College, Chicago, and Frederick Peterson, M.D., Clinical Professor of Mental Diseases in the Women's College, New York. Philadelphia: W. B. Saunders. Sydney: L. Bruck.

This work frankly disclaims any bid for scientific originality, merely professing to be what it is, A carefully prepared text-book for the use of medical students and practitioners. It contains, however, within its compass a fairly exhaustive digest of all the

essential facts of neurology and psychiatry, brought up well in line with the most recent investigations. The theoretical portions are clearly and succinctly put, and to the making of the practical parts a wide clinical experience has evidently been laid under contribution, the whole being done with a due sense of proportion. The section on neurosis (Dr. Church) is especially happy, both in arrangement and description, and Dr. Peterson's two exhaustive chapters on paranoia and idiocy are admirable in their way. The work is in no sense a collaboration, the two subjects being treated in separate monographs, for which each author is individually responsible.

Throughout the illustrations are plentiful, and many of them—particularly the mental ones—are singularly striking. Most of them are from the authors' own material.

A POCKET MEDICAL DICTIONARY, giving the Pronunciation and Definition of the principal words used in Medicine and the Collateral Sciences, including very complete tables of the Arteries, Muscles, Nerves, Bacteria, Bacilli, Micrococci, Spirilla, and Thermometric Scales, and a dose-list of drugs and their preparations in both the English and Metric Systems of Weights and Measures. By Geo. M. Gould, A.M., M.D., Author of "The Illustrated Medical Dictionary," "The Student's Medical Dictionary"; Editor of *The Philadelphia Medical Journal*; President, 1893-1894, American Academy of Medicine. A new edition, entirely re-written and enlarged, including over 21,000 words. Philadelphia: P. Blakiston's Son and Co., 1899. Sydney: L. Bruck. Price, 4s. 6d.

This is a revised and enlarged edition of the wonderful pocket medical dictionary which has become so popular with the profession. Although there has been no abatement in the popularity of the first edition of this work, the author, taking into consideration the recent tremendous increase of new words and the changes that a progressive science has achieved, recognised that its re-writing and enlargement was imperatively demanded.

This edition has been thoroughly revised, and the number of words defined is nearly double that of the previous volume. It is well bound in morocco leather, gilt edged, and by ingenious indents and leather thumb indices speedy reference can be made to any letter of the alphabet.

HOW TO AVOID TUBERCLE. By Tucker Wise, M.D., Author of "Alpine Winter in its Medical Aspects, and the Treatment of Pulmonary Affections by Mountain Air." Second edition. London: Baillière, Tindall & Cox, 1899. Sydney: L. Bruck. Price, 1s.

This is a most interesting little brochure, written in popular language upon the subject of Tuberculosis. It treats of the prevalence, predisposition, hygiene, and principal sources of consumption, with explicit instructions as to the best methods of avoiding it. It contains in an abbreviated form the gist of much of the voluminous literature which has of late inundated the medical and lay press.

THE EXPLORATION OF THE URETHRA AND BLADDER. By M. Tuchmann, M.R.C.S. Eng., M.D. Wurzburg. Formerly Surgeon to Out-Patients, German Hospital, Dalston. With 26 illustrations. London: H. K. Lewis, 1899. Sydney: L. Bruck. Price, 5s.

This monograph is the second edition in English of a pamphlet which the author published in German

twelve years ago. He now embodies in the work the results of a more extended experience which he has since gained. This book is a most valuable contribution to the anatomy and surgical treatment of the urethra and bladder, and included in it are the fruits of the researches made by the writer on living subjects at the German Hospital at Dalston, his private patients, and examinations on dead bodies, which were carried out at Guy's Hospital in London. There are six chapters, which treat respectively of:—(1) The Urethra, (2) the Bladder, (3) the Instruments, (4) Exploration of the Urethra and Bladder, (5) the Exploration of the Urinary Organs on Living Subjects, (6) the Ureter Forceps. The book is well and clearly printed and amply illustrated.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, have been duly registered as legally qualified medical practitioners in the respective colonies:—

NEW SOUTH WALES.

Lavery, Ernest Arthur, Lic. R. Coll. Phys. Edin. 1895, Lic. R. Coll. Surg. Edin. 1895, Lic. Fac. Phys. & Surg. Glasg. 1895.
 Praeger, George Daniel, M.B. Univ. Melb. 1898.
 Hiltch, Frederick, Lic. R. Coll. Phys. Lond. 1881, Mem. R. Coll. Surg. Eng. 1880, Lic. Soc. Apoth. Lond. 1879.
 Jeffries, John Nagle, Lic. R. Coll. Phys. Edin. 1881, Lic. R. Coll. Surg. Edin. 1881.
 Gaze, William Henry, Lic. R. Coll. Phys. Lond. 1878, Mem. R. Coll. Surg. Eng. 1878, Lic. Soc. Apoth. Lond. 1877.

NEW ZEALAND.

Eccles, Horace Dorset, M.R.C.S. Eng., L.R.C.P. Lond.
 Frenszley, Joseph Patrick, M.B., B.Ch., Roy. Univ. Irel. 1895, M.D. 1899, F.R.C.S. Irel. 1899.

QUEENSLAND.

Thomas, Frederick Michael, M.B., B.S. 1899 Univ. Melb.

SOUTH AUSTRALIA.

Goocher, Gilbert, M.B. & Ch.B. 1895, M.D. 1896, Durham.
 Price, Thomas Arthur, M.B. & Ch.B. Edin. 1899.

TASMANIA.

Butchart, John Elder, L.R.C.P. Edin., L.R.C.S. Edin., L.F.P.S. Glasg. 1892.
 Master, Henry Hugh, L.R.C.P., L.R.C.S. Edin. 1878.

WESTERN AUSTRALIA.

Thompson, James, M.B. Melb. 1898, Ch.B. Melb. 1899.
 Leary, William Albert Edward, M.B., B.S. Univ. Dubl. 1893.

BIRTHS AND DEATH.

BIRTHS.

FAILLES.—On the 16th October, at Oonabarabran, N.S.W., the wife of Dr. F. Failles, of a son.
HIGGINS.—On the 30th September, at Walgett, N.S.W., the wife of F. C. Higgins, of a daughter.
HOWSE.—On the 4th November, 1899, at 50 College-street, Hyde Park, the wife of Oswald Howse, M.R.C.S., L.R.C.P., of a son.
MACLAURIN.—On the 14th October, at 35 Roslyn Gardens Sydney, the wife of Dr. Charles MacLaurin, of a daughter.
MURRAY.—On the 12th October, at Mount Morgan, Queensland the wife of G. L. Murray, M.B., Ch.M., of a son.

DEATH.

SIDES.—On the 4th November, at Bourke, N.S.W., Richard Sides, M.B., B.S., of pneumonia, aged 48 years.

WANTED TO BUY a second-hand Amputating Case Must be in good condition. Address—"SPMO," Gazette Office, 121 Bathurst-street, Sydney.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

PRESIDENTIAL ADDRESS.

BY W. G. MADDOX, M.R.C.S., L.R.C.P.,
LAUNCESTON, TAS.

DELIVERED AT THE ANNUAL MEETING OF THE LAUNCESTON DISTRICT BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

It is the custom to expect from the holder of a presidential chair a presidential address, and in these days of multiplicity of medical societies it is somewhat difficult to avoid treading on old ground. Remembering that ours is an association comparatively young in years, and established in a colony where until recently there has been no medical society existing to represent the views and opinions of the medical profession, it has seemed to me that I could not do better on this occasion than deal with some matters touching the public health administration of Tasmania, using the words public health in the widest sense of the term. Owing partly to the failure to obtain proper professional advice, and to the readiness to take the opinions of laymen who were manifestly incompetent to deal with such matters, partly to the absence of any corporate body to voice the views of the medical profession, the public health and hospital administration has been conducted on lines which we can only describe as happy-go-lucky. There has been almost a total lack of method, and defects have been and are so numerous as to frequently handicap the medical profession in their attempts to improve the public health of the colony.

SANITATION.—Directly dealing with the matter of sanitation, there exists a Central Board of Health, Local Boards of Health, and a mass of legislative enactments almost sufficient in quantity for the British Empire. Many of the Local Boards of Health refrain from dealing with matters touching health questions, either from unwillingness to do so or from want of competent advice, while the Central Board of Health itself seems to have been born powerless, and unable to carry on or enforce a proper administration of health matters. For instance, medical men are compelled to notify infectious diseases gratuitously, under penalty of a heavy fine, and at the notification thereof the matter most frequently ends, for neither Government nor Board of Health makes provision for the isolation and treatment of such infectious disease.

BACTERIOLOGY.—We all know the importance of bacteriological diagnosis in actual

practice, but there is no attempt at providing properly equipped bacteriological laboratories for the use not only of the medical profession but for the health authorities. How much the profession is handicapped in this respect can be easily understood. While on this question I would point out that unless the proposed bacteriological laboratory in Launceston be established on a proper footing, so that it may be prepared to conduct bacteriological examinations for medical men and the various health authorities in the north, it will be but money wasted.

VACCINATION.—Although there is an elaborate vaccination law in the Statute Book, vaccination is practically unknown except amongst Chinamen; if vaccination is not compulsory, surely it is illegal to force it upon them any more than upon people of other nationalities. With regard to the sick poor, while in Hobart, as in some of the country districts, there is a medical officer paid by the Government to visit and treat them at their homes, in Launceston there is no such provision made. The result is that the duty of attending them is thrown upon the shoulders of the profession, on whom the demands of charity are already excessive. In Hobart, too, a medical man is paid to inspect for and attend to the contagious diseases hospital; no such provision is made in Launceston.

HOSPITAL ADMINISTRATION.—When we come to hospital administration we find an equally different state of affairs existent in north and south. In Hobart the profession have admission to the hospital, and there is a staff of honorary medical officers who have the treatment of the patients. Certainly, the honorary medical officers are elected for life, and I think this might advantageously be altered to election for a term of years. In Launceston the doors of the hospital are closed to the profession, and there is an absence of a proper system of honorary medical officers according to the method at work at all the hospitals of importance throughout the civilised world. Our society has already had much to say on this matter, so that I shall content myself by stating that until such reforms as we wish for, such reforms as are supported by the medical societies of Hobart and Launceston, and stamped with the approval of the profession, not only of Australasia, but of Europe and America, are carried out, the Launceston Hospital will fall short of what is demanded of it as a great public institution. Such,

gentlemen, is the existing state of affairs. Let me mention briefly how this should be remedied.

SUGGESTED REMEDIES—The Central Board of Health should be made an active body with proper power to carry out and enforce the administration of the various Health Acts. To ensure its work being done properly its members should be paid. Medical officers should be appointed, at least two in number, one for the south and one for the north of the island, to have charge of the public health administration, and to be responsible to the Government alone. The first of these might act as Chief Government Medical Adviser. Proper provision should be made for isolation hospitals for infectious diseases in Hobart and Launceston; public money has already been wasted in Launceston in the building of a fever ward, but owing to failure to get proper advice on the matter, the scheme has proved useless for the purpose for which it was required.

Bacteriological laboratories should be established in the north and south of the island. These could be put under the charge of the two Government medical officers, and examinations could be performed for private practitioners and boards of health, as has been pointed out by Dr. Hogg in his letter on the subject.

The Vaccination Act should be properly carried out.

A medical man should be appointed in Launceston to attend to the poor, and the same medical officer might be appointed inspecting surgeon under the C.D. Act. A proper staff of honorary medical officers should be appointed at the Launceston Hospital, so that it may be brought into line with other properly equipped institutions of a similar character. I have tried, gentlemen, to be as brief as possible in pointing out the defects in our medical organisation in Tasmania, and in indicating their remedies. Intentionally, therefore, I have refrained from dwelling on the necessity of, and arguments for reform, as I believe that you appreciate these as keenly as I do myself. If some such measure of reform is brought about, as eventually it will be, it will do much to aid the profession in what is always a difficult fight—the fight against disease. In conclusion, gentlemen, let me thank you for the honour you have done me in electing me your first president, and for the kindness you have shown me during my term of office, a term which, apart from the general work of the association, will be memorable for having seen inaugurated that somewhat herculean task, the work of medical reform in Tasmania.

REDUCING TEMPERATURE BY GUAIACOL

By G. P. STANLEY, M.B. SYD., TAMWORTH,
N.S.W.

HAVING read in the *Therapeutic Gazette* of the reduction of high temperatures by the external application of guaiacol, I have lately been trying it. The results have appeared to me good. There is almost no mention of the subject in the medical journals. My trials, so far, have only been with small quantities of the drug, on young children suffering from bronchopneumonia. The points in favour of the treatment that I have seen so far are:—(1) speedy reduction of temperature; (2) ease of administration; (3) absence of ill-effects both locally and generally.

Reduction of Temperature.—In my most successful case, E.G., *et.* 10 months, bronchopneumonia, guaiacol was rubbed gently into abdomen or chest wall seventy-six times, and temperature was thereby reduced about seventy times. On thirty-one of these occasions temperature was at 105° or over, and patient was desperately ill. The maximum reduction usually occurred in two hours, and was accompanied usually by sweating. Pulse dropped a little and patient woke out of her lethargic condition, took food better, and took notice generally. The reduction was most often 2°, but often was as much as 4°.

Ease of Administration.—The quantity used averaged five drops, took half a minute to apply, and required no dressing or covering.

Absence of Ill Effects.—Skin never became sore, even with seventy-six rubbings. No symptoms of collapse were ever seen, but rather the opposite.

I have charts in my possession on which are marked in red ink the reductions of temperature, evidently due to guaiacol. Temperature was always taken in the rectum.

THE ELECTRIC-LIGHT BATH.—In the "Journal of the American Medical Association" for December, 1898, J. H. Kellogg, M.D., describes the above under the heading of "A New Therapeutic Measure." It is claimed for the electric-light bath that it causes the elimination of more CO₂ than any other bath, while the elimination of nitrogenous wastes is much less. The amount of perspiration is about double of that given off in a Turkish bath in the same length of time. Its use is indicated in cases of nervous headache or migraine, and has proved especially useful in the rheumatic diathesis. Several forms of the bath are figured in the paper, and the author, after having used this bath in several thousand cases, feels justified in urgently inviting the attention of the profession to test its value. We understand that Dr. Baptista, of Hunter-street, Sydney, has fitted up one.

THE SURGICAL TREATMENT OF PERITYPHLITIS, BASED ON THE RECORDS OF 347 CASES TREATED AT THE PRINCE ALFRED AND SYDNEY HOSPITALS DURING THE LAST SIX YEARS.

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READ IN THE SURGICAL SECTION FIFTH INTER-
COLONIAL MEDICAL CONGRESS, BRISBANE, 1899.

At the beginning of a discussion of this character, if it is to be of any value at all, we must try at the outset to get an intelligent grasp of the disease. And in order to do this it seems to me to be very important that we should have a clear and distinct picture in our minds of its pathology.

PATHOLOGY.

In looking up the various authorities on the subject for this paper (and they are not a few), I found by far the clearest description of its pathology in Hawkins' book.

Hawkins' says :—

The old division of appendicitis into a "perforative" and a "non-perforative" form has lost its value for clinical use now that we know that both an acute general peritonitis and a perityphlitic abscess may result from non-perforative disease of the appendix. But examination of a large number of specimens makes it clear that Osler's division of appendicitis into a "catarrhal" and an "ulcerative" form is a good one. Though these two do to a certain extent overlap, inasmuch as catarrh may end in ulceration, and both conditions may exist side by side in the same specimen, yet is this distinction nevertheless useful, since they arise from different causes. The cause of the "catarrhal" form we do not exactly know, but it is clear that it is not dependent on the presence of faecal or other extraneous matter, while the "ulcerative" form on the other hand is produced mainly by the pressure of a faecal concretion or a foreign body. Equally from both these forms may arise every grade of peritonitis.

In a large number of cases it happens that the peritonitis arises through a local or a general "necrosis" of the appendix, which may be the primary condition or may arise as a result of a previous catarrh or ulceration. There is reason to believe that in these cases the necrosis is dependent upon a bacterial invasion of the tissues of the appendix-wall, and consequently a third form, viz., "infective appendicitis" may well be considered under a separate head."

Catarrhal Appendicitis.

This, he explains, may, and probably is, of very frequent occurrence, for it produces no symptoms and may subside without leaving a trace. It may be independent of the presence of faecal matter.

The result of the catarrh may be—

1. Perfect recovery.
2. Complete obliteration of the lumen, and therefore immunity from any further trouble.
3. Partial obliteration causing a stricture, possibly impermeable.
4. The appendix beyond the stricture may become cystic.

Ulcerative Appendicitis.

A primary local ulceration of the appendix, not preceded by a general catarrh, but due to a faecal concretion or a foreign body.

He goes on to say, "As the faeces begin to exercise pressure on the wall the first effect is a disturbance of the lining epithelium. As the process continues the epithelium is completely destroyed, and the mucous membrane, the submucous tissue, and finally the muscular coats disappear before the advancing pressure."

In some cases it is hardly correct to describe this process as one of ulceration. It appears to be rather an atrophy produced by pressure, and evidence of inflammation may be scanty or absent.

Infective Appendicitis.

It is a form which is almost of necessity followed by a virulent degree, either of a general peritonitis, or of the local suppurative form. . . . Most of the cases, but not all, are accompanied by a necrosis or sloughing of some part of the appendix wall." He goes on to shew that this "infective appendicitis" need not necessarily have been preceded by the catarrhal or ulcerative form, nor need there have been any faecal concretion. He makes it clear that this infective appendicitis can excite a rapidly fatal peritonitis without any necrosis or perforation visible to the naked eye or microscope.

Hawkins maintains that this form of appendicitis may result from either the catarrhal or the ulcerative form, but that it may arise independently of either, and it appears in all cases to be associated with and due to a bacterial invasion of the tissues of the appendix wall.

To explain the frequency of bacterial invasion in the appendix when we know that other parts of the intestinal tract containing the same micro-organisms are frequently ulcerated and yet escape. Hawkins suggests that it "is due to the appendix having little power of resistance," being an organ which is degenerate and functionless from first to last."

But we know that the mucous membrane of the appendix may be unhealthy and ulcerated without the walls becoming invaded with bacteria. This is probably due to "the varying virulence of bacteria under different conditions."

His general conclusions are :—

"1. Catarrhal appendicitis, marked particularly by shedding of the protective epithelium, apt to pass into a chronic condition with thickening of the wall.

2. The cystic condition of the appendix, whether due to a post catarrhal stricture or to kinking.

3. Ulcerative appendicitis due to the presence of a faecal concretion or a foreign body.

4. Acute infective inflammation of the wall of the appendix, commonly associated with necrosis of its tissues; this may occur when the mucous membrane shows slight signs of chronic disease, but in the majority of cases it supervenes upon one of the foregoing conditions.

It is made clear both by clinical and by *post mortem* observation that the first three of these morbid conditions are not attended by symptoms until the peritoneal

* Hawkins, "Diseases of the Vermiform Appendix."

coat of the appendix is involved. It is possible that vague sensations of uneasiness may arise before this point is reached, but the general truth is, I believe beyond controversy, that in all cases which claim medical attention the peritoneum is already inflamed.

The fourth condition necessarily entails the immediate onset of severe symptoms."

The points I want to emphasize are these:—

Very grave morbid changes may, and very frequently do, take place, in the appendix without giving rise to any symptoms.

A man may have catarrhal appendicitis, this may be followed after a time by a narrowing of the lumen. So much so that this may become completely stenosed at some spot, and as a consequence of this the appendix may become cystic beyond the stricture.

There may be ulceration of the mucous membrane, with or without an enterolith.

All these serious changes may take place without giving rise to any symptoms sufficiently severe to make the individual aware that there is anything the matter with him.

I am sure that many of us fail to realize this. It is a point that is not made much of by many writers on this subject. But I think the importance of it can hardly be over estimated, especially when we are considering the treatment of what are called "first attacks," "mild attacks," "appendicular colic," &c. I think it is very doubtful if there is such a thing as "appendicular colic." It is very improbable that there is ever sufficient contraction of the muscular layers of the appendix strong enough to give rise to any sensation that could be appreciated by the individual.

I remember once removing the appendix from a man who was supposed to suffer from "appendicular colic." The attacks of pain that he suffered from were fairly frequent, but they never actually laid him up. His appendix was thickened, there were a good many adhesions, and the lumen was much narrowed at one place.

CLINICAL VARIETIES.

For clinical purposes there are a variety of classifications, no two writers being quite in accord.

Talamond³ gives five varieties:—

1. Rapidly acute perforative appendicitis.
2. Sub-acute appendicitis with insidious progress.
3. Acute appendicitis with partial suppurative peritonitis.
4. Chronic relapsing appendicitis.
5. Parietal appendicitis with appendicular colic.

Kelynack⁴ only three:—

1. Simple appendicitis.
2. Perforative appendicitis.
3. Recurrent appendicitis.

Barling⁴ uses four:—

1. Mild appendicitis, in which neither abscess formation nor perforation occurs.
2. Appendicitis with abscess formation.
3. Acute perforating appendicitis.
4. Relapsing appendicitis.

Treeves⁵ adopts five:—

1. An ordinary attack, the case ending in resolution.

(3) Talamond. "Appendicitis and Perityphlitis." 1893.
(4) Kelynack. "The Pathology of the Vermiform Appendix" 1893.
(4) Barling. "The Ingleby Lectures on Appendicitis." 1896.
(5) Treeves. Article on "Perityphlitis" in "Albute's System of Medicine."

2. The case ending in suppuration.
3. An attack of the mildest type.
4. A most intense and acute attack.
5. Certain peculiar forms of perityphlitis.

Hawkins' classification is clear, simple, and practical. He does not go beyond the three chief forms—

1. An adhesive peritonitis limited to the right iliac fossa, accompanied by the exudation of a coagulable material (perityphlitis).
2. A similarly localised inflammation proceeding to the formation of pus (perityphlitic abscess).
3. A general peritonitis.

This is the classification I have adopted in dealing with the cases that have occurred in the Prince Alfred and Sydney Hospitals during the last six years.

I find that there have been 347 cases, with fifty-seven deaths, giving us a death-rate of 16·1 per cent.

There were 205 cases of perityphlitis with no deaths.

Thirty-five cases of perityphlitic abscess with eight deaths.

The appendix was removed in the interval between the attacks fifty-nine times with six deaths.

The great mortality came in the cases of general septic peritonitis; there were forty-five cases with forty-three deaths.

In twenty-nine of these cases the abdomen was opened, the appendix removed, and the peritoneal cavity flushed out and drained in various ways, but only two recovered.

There were sixteen cases of acute septic peritonitis, originating from the appendix, that died without any operation being performed.

The diagnosis in most of these cases was made in the *post-mortem* room.

Table showing the number of cases treated at the Prince Alfred and Sydney Hospitals for the last six years:—

	Prince Alfred Hospital.			Sydney Hospital.			Total.		
	Cases.	Cured.	Died.	Cases.	Cured.	Died.	Cases.	Cured.	Died.
Perityphlitis	111	111	—	94	94	—	205	205	—
Perityphlitis (abscess opened)	25	20	5	10	7	3	35	27	8
Operation for removal of the appendix in quiescent stage ..	46	40	6	13	13	—	59	53	6
Appendix removed during attack	—	—	—	3	3	—	3	3	—
Septic peritonitis—operation	23	1	22	6	1	5	29	2	27
Septic peritonitis—no operation	10	—	10	6	—	6	16	—	16

	Prince Alfred Hospital.	Sydney Hospital.	Total.
Total number of cases	216	132	347
Total number of recoveries	172	118	290
Total number of deaths	48	14	67
Death rate	20	11.8	16.1

I am much indebted to Dr. Cosh, late Resident Medical Officer at the Prince Alfred Hospital; to Dr. Ludowici, my late House Surgeon; and to Dr. Binney, late Medical Superintendent at the Sydney Hospital, for the great amount of time and trouble they spent in hunting up the records of these cases. It is only with their help I have been able to attempt an analysis of the cases.

The information we have obtained by looking through the records of these old cases ought to have been much more valuable than it is. Unfortunately, in a large number of cases the notes are most defective, and so certain important facts that one would have liked to have been quite sure about cannot be made use of.

One fact I was particularly anxious to obtain, because it has a most important bearing on the question of removing the appendix after a single attack of simple appendicitis. If it could be proved that a very large percentage of the cases of general peritonitis had previously suffered from simple appendicitis, this would be a strong argument in favour of the removal of all appendices after a single attack. From the cases under review nothing can be made of this point, because in so many cases the fact was not noted. In 16 out of the 57 fatal cases it was noted that there had been one or more attacks of supposed appendicitis, but in the rest no note was made on this point. They may have had, or they may not.

Our death rate seems to be about the average. In Porter's 448 cases the death rate was 17.23, and in Hawkins' 264 cases it was 14 per cent.

Can we hope to lessen this death rate of 16 per cent.?

In the 205 cases of simple perityphlitis there were no deaths. Some may say—What better result can you wish for than this? But we must remember that these people are not really cured. A certain number of them had been in the hospital more than once for the same trouble. I find it noted that twenty-three had been in twice, nine three times, and one had been in four times. A large number of them will surely appear again. And who can tell what form the peritonitis will assume at the next attack?

It was formerly taught by some that each attack lessened the chance of a perforation and general peritonitis. If we remember the pathology of the subject, how can we hold this?

In some rare instances the whole lumen of the appendix is obliterated and the case cured. But this is not common, and each attack makes it more impossible.

For suppurative perityphlitis, in which the abscess was opened, our death rate was 22.2 per cent. Some of these cases lived a long time, and subsequently died of pyæmia.

The death of 10.2 per cent. for cases in which the appendix was removed in the quiescent stage is rather higher than it ought to be.

But the great mortality comes in the cases of septic peritonitis—forty-five cases with only two recoveries. Certainly, sixteen of these were not operated upon; some few because they were too collapsed to stand any operation, the others because they were not diagnosed.

The great majority of the twenty-eight that were operated on did not live more than thirty-six hours.

Fourteen, that is, exactly half of them, were under fifteen years of age.

DIAGNOSIS.

This is generally easy in the simple cases. In the cases that suppurate, when the patient is a woman, we have to exclude pelvic troubles, especially pyo-salpinx. It may be almost impossible to differentiate these conditions if the appendix happens, as is not infrequently the case, to hang over the brim of the pelvis. But even if the mistake is made, the abdominal incision is the correct treatment.

The diagnosis is often difficult in these very acute cases, call them by whatever name you will—"fulminating," "perforating," or "septic peritonitis" (unless the general peritonitis has come on during a localised suppurative attack), the onset is usually very sudden. The abdominal pains are severe and general; there is tenderness all over the abdomen; the temperature and, especially, the pulse rates are raised; the breathing thoracic; and the patient looks profoundly ill from the onset. In the absence of a history of previous attacks, or of any pain starting in the right iliac fossa, and without any special tenderness or fulness in that region, how can we be certain we are dealing with a peritonitis originating from a diseased appendix? Frequently it must be impossible; but we do, or ought, to know that we are dealing with a general septic peritonitis, and also that there is but one method of treatment likely to be successful.

TREATMENT.

Ever since appendicitis has been discussed amongst medical men the question of treatment has always created the greatest interest.

At consultations on each individual case the important question to decide is, "Shall we operate?" In America, as you are aware, the tendency has largely been to operate at all stages and in all cases; while in England it has been to wait and to operate only in those cases where an operation has been obviously indicated.

What we now want is the collective opinion of Australian surgeons, and how to direct the rising generation in this matter.

I think we shall do well to steer a middle course, avoiding on the one hand the excessive surgical zeal of the Americans, on the other the too conservative surgery of the English. Although there are many and strong arguments in favour of operation immediately appendicitis is diagnosed, there are many as strong against it. The question resolves itself into which procedure will save most lives. If every case of appendicitis could be placed in a properly equipped hospital, and have the services of a competent surgeon within twenty-four hours of the onset of the attack, then, doubtless, the mortality would be diminished by early operation. This, we know, is impossible, as many of the cases cannot, for various reasons, be taken to a public or a private hospital; neither can they secure at a moment's notice the services of a surgeon accustomed to this class of work.

WHEN TO OPERATE.

McBurney⁶, in 1892, said: "Operations for acute appendicitis performed at the right time, and before the disease has progressed too far, are almost invariably successful."

In 1896, in the *Medical News*, he says: "It is in the first twenty-four hours from the beginning of the attack that we can decide not only as to the diagnosis, but as to the probable course and result of the case. If in five or six hours there is no increase in urgency, the patient is not in immediate danger, kept at perfect rest in bed. If in twelve hours there is no increase in the severity of the symptoms the patient should begin to improve. If the urgency of the case has steadily increased in twelve hours from the time when the diagnosis was made, an operation will probably be called for. After two attacks a patient is sure to have a third, and each attack renders operation more difficult and dangerous. All the advantages lie with operation between the attacks. In an operation during an acute attack the prognosis is worse."

Murphy⁷, in 1895, said: "Every case, promising or unpromising, should be treated by surgical operation at the earliest possible moment."

Another American opinion is: "We should operate on every operable case as soon as the diagnosis has been made. Mistakes are made by waiting and watching for symptoms to manifest themselves."—A. M. Cartledge, 1896, *Medical News*.

Yet another opinion: "The safest general rule is to operate as soon as the diagnosis of appendicitis is made."—C. P. Noble, *Medical News*, 1896.

If the American surgeons are rash, some of the English seem to err on the side of caution. In opening the discussion on appendicitis at Carlisle in 1896, Dr. MacDougal, in dealing with the subject of when to operate, said:—

For me a quick, thready pulse, repeated vomiting, marked depression, it may be somnolency, severe continued pain, or pain which while itself relieved is associated with a recognisable advance in local signs, acute and extending tenderness with increase in abdominal distension and thoracic respiration, are indications for operation. In children with less emphatic symptoms than these early interference may wisely be undertaken.

Surely, gentlemen, we court disaster if we are always to wait for such very "emphatic" symptoms.

In the discussion in the following year at Montreal, Dr. Armstrong in his paper said:—

The question of time to operate naturally arises here, and might be discussed for days. I believe it to be next to impossible to put into words a clear statement of the time to operate. There are two groups of cases upon which I think all will agree. In one the attack is so mild that the question of operation during the attack scarcely arises, in the other the condition of the patient when first seen is so grave that but few would dare to delay. But there is a much larger group where there seems to be room for difference of opinion, it is here that the judgment and experience of the surgeon need to be exercised to their fullest extent. . . . My working rule is to operate on well marked cases at once. This includes all cases in which there is pain with tenderness, muscular rigidity with vomiting, elevations of temperature, accelerations of pulse, and anxious facial expression.

Mayo Robson in his address at the Medical Society, in London, in 1896, said:—

The most important points to settle in any given case of appendicitis are—(1) Ought an operation to be done? (2.) If so, when?

He believes that an early operation, as first advocated by McBurney, would lead to a far greater percentage of recoveries than the method of individualising now adopted in England. "Relief or cessation of pain with a marked rise in the pulse rate is an indication for immediate operation, as it not infrequently indicates gangrene of the appendix."

Distension of the abdomen with vomiting and rapid pulse are signs that admit of no delay, as they are indications of extending or of general peritonitis."

Again, in address on "The Dangers of Delay," at Nottingham this year, Mr. Robson says:—

The removal of an appendix before suppuration, perforation, or gangrene has occurred, or before firm adhesions have formed, is practically unattended with risk In waiting for resolution we not infrequently land ourselves in serious difficulties, and have to operate under unfavourable circumstances. . . .

Speaking about suppurative appendicitis he says, "Whatever form it assumes, whether with or without perforation, or with or without gangrene, it demands operation, which in my opinion should be advised at the earliest possible moment, that is, as soon as a probable diagnosis is arrived at. He has never regretted operating, but he has seen several cases which

(6) McBurney *New York Medical Record*, April 16th, 1892, and *Medical News*, No. 24, 1896.

(7) Murphy, *Medical News*, January 6th, 1896.

terminated fatally because the operation was not strongly urged.

Treeves* in the article on Perityphlitis in "Albutt's System of Medicine," under the heading of "Operative Interference During the Acute Attack," says:—

The main feature in this treatment consists in the urgent advice that a free incision should be made down to the inflamed area as soon as there is evidence that suppuration has taken place. It may be laid down as a rough rule that the use of the knife will very seldom be called for before the fifth day.

Of course Mr. Treeves is here referring to cases of localised peritonitis with abscess, and not to perforative peritonitis. For, further on, in arguing against early operation in all cases, he says:—

It is urged that certain cases have ended fatally within the first 36 hours by perforation into the general peritoneal cavity. Such cases are exceedingly rare; they cannot be anticipated, and they are not difficult to recognise. In most of them the very first symptoms are those of perforative peritonitis. When such a case is met with the abdomen should, of course, be opened at once, and the perforation dealt with as is the practice in dealing with other forms of perforative peritonitis.

I quote this because in this article Mr. Treeves does not, beyond these few words, deal with the treatment of these acute perforating cases. And I happen to know that some men are now under the impression that he has modified his views so much that he does not operate in any case before the fifth day. As a matter of fact he says nothing of the sort. When he speaks about the fifth day he is referring only to cases of localised perityphlitic abscess.

In cases of simple appendicitis I think we shall do well to follow the old rule, and not interfere during the attack. But I think it is our bounden duty, seeing the impossibility of knowing the condition the appendix is in, to advise the patient to get the appendix removed during the quiescent stage. This fact has been more than ever impressed upon me since going through the records of the fatal cases that I have tabulated in this paper. A fatal case of general peritonitis has often been preceded by a mild attack some months before. In relapsing appendicitis the sufferer does not require any urging. He is thankful to get rid of a source of annoyance that so frequently interrupts his work and prevents him from enjoying life.

In suppurative cases the necessity for an operation soon becomes obvious. In operating in these cases it is not wise to seek for the appendix, unless it obtrudes itself upon you. Many deaths have been caused by a general

peritonitis set up by too eager a surgeon when opening a perityphlitic abscess. But it is quite a mistake to suppose, as many writers would lead you to believe, that in these abscess cases the appendix gives you no further trouble. My experience is quite the other way. When the abscess has done discharging and the wound has healed, we should advise these people to have the appendix removed.

The following case is a good example:—

M. H. was admitted to the Prince Alfred Hospital, February 7th, 1896. He was then suffering from an ordinary attack of perityphlitis, and had a large tender mass in the right iliac fossa, which disappeared with rest. He was sent home well after being in the hospital five weeks. He was re-admitted June 10th in the same year, and a large perityphlitic abscess opened, but the appendix was not removed. After a few weeks the wound healed and he was discharged. Again re-admitted, September 18th, 1897, it was found that another abscess had formed in the old situation. From this some very foul smelling pus was evacuated, and the cavity plugged with gauze. The first time the gauze was changed faeces passed through the wound. Subsequently a tube was inserted, which was lost, and ultimately passed through the rectum. He was discharged cured, January 20th, 1898; re-admitted for the third time, May 19th, 1899. He gave an account of four attacks during the intervening 18 months, the last four days before admission. He described the acute symptoms of these as lasting only twelve hours, but that he felt ill "for weeks afterwards." A hard mass could be felt in the right iliac fossa. On May 25th the abdomen was opened over the caecum, and after some difficulty with thickened omentum and numerous adhesions, the appendix was removed. It was found to be much thickened but complete, and presented a discoloured spot near its base, evidently marking the seat of perforation two years previously. Here the wall was thinned but soundly healed. He was discharged cured, June 23rd, 1899.

The mortality in the acute perforating or infective cases must always be high.

No doubt many would die even if operated on within the first few hours, for it seems that in some of these cases vast hordes of malignant bacteria invade the peritoneum, and reach its furthest limits in a wonderfully short space of time. A poison seems to be produced, which when absorbed very quickly proves fatal. This poison is made and absorbed so quickly that flushing out the peritoneal cavity does not stay its lethal effect, because it is already in the blood. I think the time will arrive when we shall inject a "peritonitis antitoxine" in these cases, and by this means and early operation save some lives.

But all these cases are not so fearfully malignant, and even now with the means we have at hand we ought to get better results. To do this we must get these cases earlier.

We can only do so by impressing upon medical men who see these patients when they are

(*) Treeves, "Albutt's System of Medicine." Vol. 8

first taken ill the great importance of recognising the nature of the disease at the very onset, in order that surgical aid may be obtained with the least possible delay. In looking over the hospital records, I am sorry to say that I found that in some of the fatal cases there was considerable delay between the time of admission and the operation, caused apparently by the patients being admitted under the care of the physician.

I maintain that all cases of general peritonitis, and all acute cases where appendicitis may reasonably be suspected, should be admitted under the surgeon instead of the physician.

In operating on these acute cases the surgeon may not always be quite sure which is the best place to open the abdomen. In the absence of any definite signs pointing to the peritonitis being due to the appendix, he will probably decide to open the middle line.

In the event of the appendix proving to be the cause of the trouble, and should there be any difficulty in reaching it, another opening over the cæcum does no harm, and is advantageous for the purpose of drainage; it also facilitates a thorough flushing of the peritoneum. A point that might well be discussed is this: After removing the appendix in these septic cases, how should the abdominal cavity be flushed, and with what? Should counter openings be made, and where? Mayo Robson advocates making counter openings in the loins. With this method he had five successful cases out of six in one year, but he says he does not expect to have such good luck again.

Mr. Cuthbert Wallace, at the Medical Society in London, early this year, read the notes of three cases of appendicitis with diffuse peritonitis. "Each case had commenced with local abscess that had spread and infected the peritoneal cavity. In two instances the peritonitis was general, and in the third it was limited to the structures behind the great omentum, reaching no higher than the transverse meso-colon. In all three the appendix was removed, and the intestines were turned out on the surface of the abdomen and cleaned with sterile water, while the belly cavity was flushed with the same fluid. He believed this was the most rapid and effectual method of dealing with such cases. It was next to impossible to clean the peritoneum while the intestines were *in situ*, because the stream did not flow in a sufficiently even manner, but simply washed infective material from one part of the abdomen to another. . . All three cases recovered without a bad symptom."

For some time I have thought that this would be a good way of dealing with these cases, but I have never done it completely, perhaps out of consideration for the anæsthetist, and the natural dislike to a death on the table, and all its attendant annoyance. Mr. Wallace's cases are certainly very encouraging, and I think the plan worth a trial. So far only two of my cases of general purulent peritonitis from a diseased appendix have recovered. In both these cases the abdomen was opened over the cæcum only, the peritoneal cavity was washed out and drained after the method of Morria. To sum up then:—

I am of opinion that we should remove the appendix in all cases after an attack of appendicitis, both in the simple cases and those in which a localised abscess has been opened.

But in advocating this treatment, I do not for one moment wish to imply that the operation should be lightly undertaken by all and sundry. You cannot whip out an appendix like you can a tonsil.

What does McBurney himself say? "It is a serious operation, often a very difficult one, one requiring general surgical skill, good assistance, and every antiseptic precaution, and I do not recommend the operation to one who has never seen it done."

We should bear in mind the aphorism of the Father of Medicine:—"The physician must not only be prepared to do what is right himself, but make the patient, the attendants, and externals co-operate." And unless we can do this by placing the patient in a suitable environment, and obtain for him skilled surgical aid, it will be far safer for him to keep his appendix.

DONATIONS of any works, old or new, medical or surgical, etc., dealing with *children* will be gratefully acknowledged by The Hospital, the Children's Asylum, Randwick, N.S.W. Donations may be left at the office of this journal, if desired.

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INJURY TO HEAD FOLLOWED BY SYMPTOMS AT A REMOTE PERIOD.

BY SAMUEL T. KNAGGS, M.D., F.R.C.S., I.,
ETC., SYDNEY.

T.G., aged 13 years, residing with his mother in a suburb of Sydney. Admitted into Craigend Private Hospital, November 13th, 1899.

History.—About six years ago in attempting to slide down banisters of stairs lost balance and fell from a height of about twenty feet (two storeys) upon the ground floor (wood, covered with linoleum), the left fronto-temporal part of the head impinging upon the floor. The concussion caused unconsciousness, which lasted for fourteen hours. He was attended by a local doctor, who detected no fracture, and evidently suggested rest and quiet, as no medicine was prescribed. He gradually recovered, but for three months subsequent to the accident he was irritable, and at times subject to sudden attacks of violent passion. He then suffered from no loss of memory, had a distinct recollection of the fall, and made no error in identifying persons whom he had previously known. The irritability passed off, and his condition may be described as having been normal until about seven months ago. Then he complained of headaches, which were accompanied by vomiting or retching. At first the headaches lasted about twenty-four hours, but subsequently extended for a period of three days.

In addition to the headaches he used to become heavy and drowsy, and would lie down. At intervals, the pain would induce paroxysms of crying. He was easily irritated, and dreaded any kind of noise. About six weeks ago he became sluggish in gait, and torpid in manner; he seemed to drag his feet, and there appeared to be a loss of power in his left side, and the eyes became affected—a drooping of the left eyelid, and a divergence of the left eye from being parallel with the right one. Then the headaches became less severe, but he appeared to be more stupid, lost the memory of the names of things, became unable to write, and exhibited an inability for arithmetical calculations. Prior and subsequent to the accident he had been very clever at school examinations and had taken prizes. The mother thought that he had lately grown stouter—in fact she had to enlarge the girth of his clothing. He had a very good appetite, except at intervals when the headaches supervened, and has lately been ravenous. On Thursday, November 9th, his mother took him for a trip to Manly (4 to 6 p.m.), but on reaching Manly he became tired and worn-out, and exhibiting an inability to walk she took him home again. It being a general holiday she thought that the crowd, etc., induced undue excitement and caused the subsequent illness.

Early on Friday morning he had attacks of shiverings or shudderings, and at 3 a.m. that morning he was compelled to get out of bed to retch, and fell upon the floor. He vomited small quantities of matter like phlegm, with spots like blood in it, after which he seemed to be relieved. This was followed by headache. Then he became stupid; slept heavily until 11.45 a.m. At 1 p.m. he ate a hearty dinner; during that afternoon he became restless and went out, and most of the time appeared to be very much interested in noticing a watchmaker working in his shop and other matters connected therewith. During the day the doctor was sent for, but the patient got better without any treatment, and has since been brighter and better than he

has been for some time. The doctor expressed an opinion that there was an abscess in the brain.

This patient was first seen by Dr. Knaggs on November 6th. On Wednesday, November 8th, he was seen in consultation by Drs. Knaggs and MacCormick at Craigend Private Hospital. As a result of this examination, it was concluded that one of the following conditions might possibly be present:—

1st. An abscess of the brain.

2nd. An hydatid tumour.

3rd. Some new growth.

It was, however, decided to send the case to Dr. Manning for his opinion.

Dr. Manning examined the patient on same day, and finding that some twelve years ago he had been consulted by friends of this lad's maternal uncle, who was suffering then from G.P., he, having in view the peculiar mental symptoms, the silliness of manner, the unnatural placidity, the mental hebetude, the gain in weight, the paraplegic gait, and the peculiar indistinctness of speech, then included amongst the possibilities—

4th. General paralysis, or other general brain degeneration, supervening upon some coarser lesion.

Physical Examination.—The lad looks his age (13 years), is well nourished and plump, could be almost designated a "fat boy." In repose, the face has a pleasing expression, but upon being spoken to the features settle themselves into an unmeaning silly smile, or laugh, the left side of the mouth being drawn upwards and outwards, left eye exhibiting ptosis in a slight degree. He is somewhat emotional, and towards the termination of the examination, upon finding that he could not remember things, he became excited, wept, and begged that no one should be told that he "could not remember."

There is well marked paralysis of right side of the face, slight external strabismus of left eye, pupils of both eyes very mobile; he describes occasional diplopia. On protrusion of tongue there is very little deflection.

There is loss of grasping power in both hands, more marked in left than right (on Dr. Manning's examination on November 8th, with dynamometer, he found R. 80, L. 50). There is an unsteadiness of gait that could hardly be called ataxic, and yet did not suggest paralysis. In walking the legs seemed to be spasmodically thrown outward and forward alternately in a sluggish manner, and the heels first touched the ground.

Marked patellar reflex, more marked in left leg; clonus questionable, hardly a perceptible

swaying with eyes shut and feet parallel and close together; co-ordination good, with eyes shut could touch nose with forefinger.

Considerable loss of speech, or, rather, difficult enunciation—want of “grip of words,” which were either inefficiently finished off or imperfectly pronounced, with occasional loss of memory of words, yet difficult to decide whether aphasic or due to absence of co-ordination of organs of speech; possibly both contributed to the result. Mother states, and appearances indicate, that in his disposition he is very placid and is now never irritable. Even if hungry never asks for food.

Mother states that there is no trouble with the excretions.

The patient was sent to Dr. Gateward Davis for examination of the eyes.

Result of Dr. Gateward Davis' examination:—On September 17th the patient was seen by Dr. Gateward Davis, in consultation with Dr. Knaggs. The history of case carefully re-considered.

Regarding the hereditary taint as exemplified in the uncle's history, that is:—A tendency to brain degeneration from some specific exciting cause.

The history of the mother's married life is very interesting. She ought to have had ten children, and the patient is the sixth of the eight that are alive.

The fifth conception became a mishap at three months. Thomas (the patient) was the sixth. No complication at birth, which was rapid, only lasting half an hour.

The next child, at full term, was born alive, but suffered from convulsions daily from birth, and died at the end of the month. The mother attributes this to a shock to herself caused by the sudden death of her father three or four weeks before the child was born. The mother states that the body of the child rapidly became discoloured—was black and blue all over. Prior to death there were no spots over the buttocks. She has had subsequently three other healthy children; when the last one was born her age was 41.

Sequence of Symptoms.—The patient was perfectly healthy when at school up to the end of June this year (six months ago), excepting that he suffered from headaches. This made the parents think that he was overworked at school, so they brought him for a change to a seaside resort, at which place he used to work in an orchard, doing hard work. The headaches increased in intensity and duration, and he now developed an intolerance of noise, especially that made by the younger children. In this phase he was at

first very patient; later he expostulated and complained, but, the noise not being abated, he became excited and threatened to go for those who would not obey his request for peace. (His mother states that just after the accident he was liable to fits of very great temper).

Attention was first attracted to him at the end of last August. His mother noticed that his memory was very bad; also upon being sent on a message his movements became very slow, so much so as to cause comment. His mother remarked that he seemed so very cumbersome that he moved like an elephant, and on this account took more notice of him. Then his gait became worse, and at the end of September he said that he could not work any more with the spade, as it made him so tired (failure of power in left arm?). At this time he had been employed in digging, in which occupation most labour is thrown upon the left arm. Up to this time he used to go out in the cart to get manure, but had to discontinue doing so in consequence of the increase of intensity of the headaches.

The mother then left him for a time and went to town, and on her return early in October she noticed:—First, ptosis of left eyelid, and an *internal* squint. When she accompanied him in his walks he complained of double vision, giddiness, and a tendency to fall upon his left side. In fact, she found it necessary to walk upon his left side so as to be ready to support and assist him.

Summary of sequence of symptoms:—

June.—Headaches.

July.—Loss of memory.

August.—Loss of power left leg.

September.—Loss of power left arm and worse headaches.

October (early in).—Ptosis and internal strabismus. About this time was first noticed difficulty in seeing and tendency to fall upon left side, but it is quite possible that these symptoms set in much earlier.

Teeth:—Left upper eye-tooth decidedly pointed; left upper central incisor deficient in the outer of the three points; right upper canine has a suspicion of being slightly notched; left lower canine is pointed; the outer upper incisors are very small, and have a tendency to being notched, especially the left one.

Ophthalmoscopic Examination:—Vision of right eye apparently about $\frac{2}{3}$; vision of left eye much less, but could not be definitely determined—is probably $\frac{2}{30}$. (Much difficulty experienced in determining vision, patient treating whole operation as a joke, and having to draw the test types as he could not remember the names of the letters).

DIAGRAMS TO ILLUSTRATE DR. KNAGGS' PAPER ON "CASE OF INJURY TO HEAD, FOLLOWED BY SYMPTOMS AT A REMOTE PERIOD."

FIG. 1.

A drawing of the Right Cerebral Hemisphere, showing the localisable areas on the median surface. (After Gordinier.)

FIG. 2.

A drawing of the Left Cerebral Hemisphere showing the different localisable areas of the external surface. (After Gordinier.)

(The above drawings were utilised in mapping out the diseased areas in Figures 3 and 4).

FIG. 3.

FIG. 4.

Figs. 3 and 4. Case of T. G.—The references and location of motor areas after Ferrier. The mottled patches indicate deteriorated portions of brain as determined by symptoms.

REFERENCES.

- (1) Centre for movements of opposite leg and foot. (2, 3, 4) Centres for complex movements of arms and legs, as in swimming.
 (5) Extension forward of the arm and hand. (6) Supination of the hand and flexure of the forearm. (7, 8) Elevators and depressors of the angle of the mouth. (9, 10) Movements of the lips and tongue. (11) Retraction of the angle of the mouth.
 (12) Movements of the eye. (12, 12*) Vision. (14) Hearing. (a, b, c, d) Movements of the wrists and fingers.

Fundus, Left Eye :—Disc swollen, blurred round the edges, very small arteries. On one of the upper veins a small globular enlargement about twice the diameter of the vein (*see sketch*), suggestive of an aneurism. No sign of hæmorrhages. Left disc very generally white, swollen, and anæmic, in contradistinction to the right disc, which is more markedly affected around the periphery, the centre portion being somewhat congested.

The ophthalmoscopic examination shows that there has been a descending inflammation involving the left optic nerve, which has subsequently extended to the right. The sheaths of the optic nerves have been the principal factors in producing this result. (The conduction of inflammation by sheaths would primarily involve the periphery of the disc).

The left eye has now a tendency to roll outward, the deficiency of its vision being an obstacle to co-ordination which would keep the axes of the eyes parallel.

In the left eye, the condition indicates that atrophy has supervened upon neuritis.

On 16th November patient complained of a buzzing noise in left ear, followed by a small discharge of pus (about one or two drops). Later on similar happened to right ear, only to a less extent. Throat normal.

Conclusions :—As the result of careful examination of this case, and having had several consultations with Drs. MacCormick, F. Norton Manning, and Gatewood Davis, the following conclusions were formed :—

The absence of pressure symptoms, the sub-normal temperature (97° F.) of the patient, the inability to localise any special lesion, and the gradual sequence of symptoms, suggest the idea that this is not an abscess, a hydatid, or a new growth, but a gradual decay of brain power, involving consecutively the following areas, in the order named :

Memory.

The higher psychical powers.

Motor area, left leg.

Motor area, left arm.

Ocular motor and visual area. (See Figures 2, 3, 4.)

The neuritis will be progressive; vision is almost lost in left eye, and will surely be lost in due course in right eye. Much against my first impression, it is now forced upon me that this is a case of general, progressive brain degeneration, which no operation can arrest; and probably a trephining and exploratory operation would hasten the course of the disease.

DEPRESSED FRACTURE OF THE SKULL, FOLLOWED BY SYMPTOMS AT A REMOTE PERIOD. — OPERATION. — COMPLETE RECOVERY.

BY SAMUEL T. KNAGGS, M.D., F.R.C.S.I., ETC.,
SYDNEY.

REV. Father A. Q., French missionary, aged 25 years, consulted me on November 20th, 1897. The following is the history of the case :—When about 7 years of age he fell from a tree to the ground, a distance of fifty feet, and, his head impinging on a sharp stone, sustained a depressed fracture of the skull on the right side of the back part. It was oblique in direction, about two inches in length, and traversed the posterior inferior angle of the right parietal bone. An hour after this he became unconscious, and had no recollection of the visit of the doctor who was summoned to attend him. No attempt was made to elevate the depressed bone, and the treatment, which lasted about six months, consisted of dressing it with an ointment. For four months there was an abundant discharge from the wound, which then gradually healed and was quite well at the completion of the six months. From the age of 9 until 17 he studied classics, and always experienced considerable difficulty in all studies which required the memory of words. He could, however, easily remember the substance of such subjects which he studied. During this period he had no trouble from headaches. They were very few and of a mild character. At the age of 19 years he studied philosophy; then he began to suffer frequently from severe headaches, and then experienced an absolute incapacity for any intellectual work. From that period until the present time he has been subject to frequent attacks of giddiness in the head. At 20 years of age he was exempted from military service in consequence of the depression in his skull. At 22 he noticed his intellectual faculties and memory to be growing weaker day by day, with an exacerbation of the headaches, which became more intense and persistent without any cessation night or day. Little things worried him; nothing could distract his mind from his condition; the very sight of a book produced a feeling of repulsion, and when he forced himself to read he was so absent-minded that he could not remember what he had read. When writing a letter he had frequently to re-read what he had written, so as to find the thread of his thoughts; when speaking he could not

find the usual words to express his ideas. He felt as though his brain were in a state of constant vibration, and he became upset by the slightest contradiction or worry. His doctor, attributing all these symptoms to intellectual overwork, ordered absolute rest. This was tried for a year and no improvement took place. The doctor, hearing that he was anxious to go to the Islands, thought a change to active life would be beneficial to him. However, since his arrival in Australia there has been no change for the better—indeed, at times he suffers still more intensely from the headaches, and the loss of memory has become more intensified.

The following are the more evident points with reference to his symptoms:—

1. Acute headaches, lasting nearly all day, during the past four years.
2. Weakening of memory ever since the fall.
3. Frequent cramps in his left leg and inability to use his left hand as dexterously as his right.

Having had this patient several months under observation, and carefully considered all the aspects of the case, I strongly recommended an operation for the removal of the depressed portion of the skull,

but suggested a prior consultation with Dr. MacCormick. Subsequently, I saw the patient in consultation with Dr. MacCormick, who concurred in the propriety of an operation, which we both thought would be productive of good results.

On May 2nd, 1898, he was admitted into Craigend Private Hospital, and prepared for operation, which was performed by Dr. MacCormick on May 5th. On the day before the operation the head was shaved and a plaster cast was made showing the seat and nature of the injury. The accompanying electro-photo reproductions of the cast give an excellent idea of the depression and its situation.

I administered the chloroform, and Dr. MacCormick proceeded with the operation. He made a semi-circular incision through the scalp, with the convexity upwards, and reflected the coverings so as to freely expose the depression in the skull, and then with mallet and chisel cut out an oval piece one and a half inches in length by an inch in width, which completely included the depressed fragment. There were no indications for interference with the dura-mater, which was left intact. The wound was closed in the usual manner and dressed with the strictest antiseptic precautions. The patient made an uninterrupted recovery and left the hospital on May 16th, the eleventh day

FIG. 1. Back View of Cast.

FIG. 2. Vertex View of Cast.

ELECTRO-PHOTOGRAPHS OF PLASTER CAST ILLUSTRATING DR. KNAGGE'S PAPER ON "DEPRESSED FRACTURE OF THE SKULL, FOLLOWED BY SYMPTOMS AT A REMOTE PERIOD—OPERATION—COMPLETE RECOVERY."

(Reference to Figure 2, page 531, demonstrates that this injury involves the areas of memory, and control of left leg).

after operation. A few months subsequently his health was sufficiently restored to enable him to resume his duties as missionary, and fourteen months from the time of the operation I received the following letter from him in French, the translation of which concludes this paper:—

[TRANSLATION.]

Gilbert Islands, Byron Island, May 4th, 1899.

DEAR DR. KNAGGS,

It is just a year to-day since I underwent, at the hands of the learned and skilful Dr. MacCormick, the severe operation on the head, the details of which you know well enough without my calling them to your memory at this time. What I want to tell you now is about the wonderful and almost radical success of the operation.

After a year's experience and careful watching, and having made a comparison of my former condition with my present state—having spent a period of six months in the tropics following divers occupations, diverse and many, which I found I was capable of performing with a tranquility and calmness of mind unknown to me before the operation—I also neither experienced fatigue nor acute pain.

I have no manner of doubt regarding the good effects of the operation. I feel sure that these results, which appear to have reached their goal, will continue to be more strongly developed year after year, because I have noticed that it was by a process of graduation that they manifested themselves in my case.

I am very pleased, Dr. Knaggs, from this the remotest part of the Gilbert Group, to give you the lie circumstantial to the speech you made to me when you first saw me in Sydney in November, 1897:—"Poor young man, your life has been sacrificed."* This refutation, dear Doctor, far from being any disparagement to you, only redounds to your credit, and to that of your distinguished colleague, Dr. MacCormick, because nobody knows better than I do, that this life, which you said had been sacrificed, has been given back to me by you and your colleague's good and skilful efforts.

I feel every day taking root again in life by the natural budding of my faculties, just as a withered little bush does after a heavy tempest rain—this simile is very real, and not a bit exaggerated. . . . It is unnecessary to tell you, dear Dr. Knaggs, that I give you full and entire liberty, as you may think fit, to make use of this letter and all other documents in your possession about my case. I know full well that whatever is in your hands will be used for the benefit of humanity.

With respectful remembrance,

A. Q.

* I remember involuntarily making this remark, but as our interview was through the medium of an interpreter, I did not think he would know what I said.

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Paddington, Sydney,

PREGNANCY COMPLICATED BY MYOMATA.—EXHIBITS.

BY RALPH WORRELL, M.D., M.CH., SURGEON TO THE DEPARTMENT FOR WOMEN AT THE SYDNEY HOSPITAL.

THE majority of members being engaged in midwifery practice it might be of interest to bring forward a not rare complication.

History.—G. D., *æt.* 37, married eighteen months, never pregnant, menses regular until nine weeks prior to operation, since which there has been no sign. The flow is usually considerable and accompanied by pain. Has had severe abdominal pains since the menses have ceased, and the abdomen has increased in size.

P.C.—There are the breast changes of pregnancy. The abdomen is occupied by a tumour extending two inches above umbilicus, irregular and hard, but not tender.

P.V.—A down growth blocks the pelvis on right and posteriorly, making delivery at term per *vias naturales* impossible.

November 2nd, 1899.—Hystero-myomectomy by Watson's method.

The specimen consists of an irregular multinodular myoma of uterus, with scores of small secondary myomata over the surface of main masses. The uterine cavity occupies the lower portion of the tumour, and contains ovum of about one month. The recovery was very easy, the pulse being 70 to 84 throughout, and the temperature being normal, except for a rise to 100° on second day for an hour.

It would be within the recollection of members that Professor Watson had given a luminous description of his method in a recent number of the *Australasian Medical Gazette*. He (Dr. Worrall) might mention that this case made the thirteenth consecutive recovery which he had obtained by it, and he thought this was fairly strong testimony to its advantages, especially in view of the fact that more than half the cases were difficult, and two were cervical myomata, which Professor Watson classed amongst the most difficult operations in surgery. He presented photographs of them by Dr. Lawrence Harris, of the Sydney Hospital, in which the sub-serous development was beautifully shown. He also presented a photograph of another of the series, representing pregnancy of four months complicated by myomata and ovarian cyst. The condition was correctly diagnosed, except that the ovarian cyst was thought to be a hydronephrosis of the right kidney. This was due to the myomata crowding the ovarian cyst outside and behind the colon into the right kidney pouch.

The diagnosis is not as a rule attended with great difficulty. The symptoms of pregnancy, associated with a rapid increase in the size of a previously existing tumour and an obscurely elastic, relatively soft area in some part of the tumour mass enable one usually to arrive at a correct conclusion. In some cases, of course, symptoms are absent, and the presence of the tumour is only discovered during labour. This must have come within the experience of most men engaged in a large midwifery practice. If the tumours are sub-peritoneal out-growths in the upper segment of the uterus they will exert no injurious influence upon the progress of labour, but if interstitial, *ante*, or *post partem* hæmorrhage may occur, and, if situated in the lower segment, they will cause more or less serious dystocia.

Treatment, as in all diseases, must vary with the factors present in each individual case. The majority may be let alone. Tumours of the lower segment may sometimes be pushed above the pelvic brim, and further treatment postponed until the termination of the pregnancy, or, they may be enucleated per vaginam; finally, when, as in the cases referred to to-night, these methods cannot be adopted, and the growths are already causing serious symptoms, and certain in the future to cause more, abdominal section should be done, and the growths removed with or without the uterus, according to the condition.

ABDOMINAL EXTRAVASATION OF BILE.

By B. POULTON, M.D., M.R.C.S., LECTURER ON SURGERY, ADELAIDE UNIVERSITY, LATE HONORARY SURGEON, ADELAIDE HOSPITAL.

ALTHOUGH gall stone colic and jaundice due to the impaction of biliary concretions come frequently under notice, the comparative rarity of extravasation of bile into the abdominal cavity as a complication of gall stones seems to me sufficient warrant for the recording of the following instance. I have never met with a similar case before, and have only once (and that during the last year) seen a case of gangrene of the gall-bladder.

On the morning of July 30th, my friend Dr. H. H. Wigg asked me to see the subject of the present paper. We found him jaundiced, feverish and suffering intense abdominal pain. The abdomen was extremely distended and tender, the pulse weak and rapid. There was dulness in the flanks. He was evidently suffering from acute peritonitis, associated with

and probably due to extravasation of bile. We were informed that he was a carrier 33 years of age, that until recently he had enjoyed excellent health, and was always a strong, active, sober man. Has been engaged during the last four years on the roads in Western Australia. Was ill for seven days in May, 1898, with abdominal pain, and says he was treated for congestion of the liver; in July suffered a sharp attack of colic, and in February of this year began to feel very much out of sorts, and has never since enjoyed good health. Caught cold at Easter, was feverish, suffered abdominal pain, and was taken into the Norseman Hospital, where he remained three weeks jaundiced, and had two very severe attacks of pain and vomiting. He has not felt able to do hard nor continuous work since, but has been fairly active at times, and seems to have had but one definite attack of colic in May or June. Arrived in South Australia on July 12th, and has been going about freely, riding his bicycle considerable distances and feeling on the whole much better.

On July 26th he ran a short distance to catch a train; next day felt out of sorts, and, fearing an attack of colic, took a dose of Epsom salts. A severe attack of biliary colic came on at night, and Dr. H. Wigg began attendance at Parkside. Notwithstanding repeated injections of morphia, pain continued, and on the morning of the 30th peritonitis was very evident.

In consultation it was decided that immediate laparotomy afforded the only possible chance of recovery, but, owing to the patient's very exhausted condition, the outlook was unpromising.

He was driven to the Wakefield-street Private Hospital and taken at once into the operating room. Before operating syphonage of the stomach removed several pints of bile-stained fluid. Dr. Wigg then administered ether.

Incising the abdominal wall over the region of the gall-bladder, the muscles and fasciæ were found loaded with bile, and on opening the peritoneum seven ounces of bile was collected. The gall-bladder was found distended and very large. Bile-stained lymph thickly coated the right lobe of the liver, the gall-bladder and the adjacent intestines. Coils of small intestine were seen to be brightly injected. The general abdominal cavity contained a quantity of bile-stained fluid. Continuous irrigation with hot saline solution was diligently carried out, and through incisions made in the right loin and

over the pubis large tubes were carried into the lumbar region and the pelvis.

The fundus of the gall-bladder was drawn up, incised, and a small calculus felt floating free in its cavity. The gall-bladder was attached to the parietal peritoneum after careful exploration had failed to disclose any rent in its surface or in the ducts. No stone was removed. Many gallons of saline solution were used in washing out the peritoneal cavity, and the whole proceeding lasted about two and a-half hours. During this period strychnine was injected, and care was taken to sustain the warmth of the extremities.

The after-treatment in hospital lasted six weeks, and, in spite of an intercurrent double pleurisy and a phlebitis of the right saphena, a satisfactory recovery was made, and the patient is now engaged in wheat-buying in the country, but has still a small sinus of the gall-bladder discharging mucus.

Points in the after-treatment were—the injection of strychnine, $\frac{1}{80}$ gr. every four hours during the first two days; the administration of a grain of calomel every hour for eight hours; early use of enemata; free and frequent irrigation through the tubes, which were, however, removed in a few days; frequent syphonage and lavage of the stomach to combat distension with fluid and gas and consequent dyspnœa.

For more than a week, notwithstanding free purgation, there was much trouble and distress from immense distension of the stomach, and nothing relieved it so much as syphonage.

During the early days feeding was mainly rectal. For a month the temperature ran to 100° at night with marked increases at the times of pleurisy and phlebitis. There was deficiency and sometimes a total absence of bile in the motions during the first few days only. At the expiration of a month I closed the sinus into the gall-bladder with a subcutaneous suture. Four days after the temperature rose to 104° with a rigor, and the suture being removed, the temperature fell.

I think this was a case of perforating ulceration of the common duct, due to the impaction of a gall stone or stones.

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THE POPULARITY OF CAMBRIDGE UNIVERSITY MEDICAL SCHOOL has again been shown among British students. The entry of new students is larger than at any other school at the beginning of the medical year 1899-1900.

CASE OF PROBABLE SYPHILITIC DEPOSIT IN, OR IN THE IMMEDIATE NEIGHBOURHOOD OF, THE OPTIC COMMISSURE.

By W. F. TAYLOR, M.D., &C., HON. OPHTHALMIC SURGEON, BRISBANE HOSPITAL.

READ BEFORE THE QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

R.L., aged 31, labourer, married, was admitted as an out-patient at the Brisbane Hospital on June 13th, 1898.

He stated that about three years previously his vision became impaired and continued so for two months, after which it improved and remained good until three weeks ago when a glimmering in the eyes came on, and now he cannot see well in the day time, but sees better in the twilight and by lamplight. He had pains in the head for a week before present dimness of vision came on. Has had syphilis.

Present Condition:—Is rather thin, appetite good, bowels regular, sleeps well, is free from pain, and feels well; the dimness of vision being his only ailment. V.: Right eye, cannot count fingers; Left $\frac{5}{10}$, Jg. 16. Both discs were pale. There was no increase of tension in either eye. The movements of the eyeballs were not affected. The pupils acted to light and to accommodation with convergence. The diagnosis was probable syphilitic deposit in the chiasma, or in its immediate neighbourhood, and a pill composed of hydrarg. c creta, gr. i., pulv. ipecac. co., gr. i., and ext. gent. gr. ii., was ordered to be taken every four hours, and ungt. hydrarg. to be rubbed on inside of thighs night and morning.

On June 23rd, five grain doses of potas. iod. in half an ounce of inf. gent. co. were given three times a day.

On June 30th, the pills of hydrarg. c creta and the iodide of potassium mixture were stopped, and a mixture containing liq. hydrarg. perchlor. 3i. potas. iod gr. v, and inf. gent. 3ss, was given three times a day.

On July 14th, the vision was: right eye, $\frac{1}{10}$; left eye, $\frac{1}{15}$.

He continued taking the mixture, and on October 24th, the vision was: right eye, $\frac{5}{10}$; left eye, $\frac{1}{15}$.

On December 19th, the vision was: right eye, $\frac{1}{15}$, Jg. 10; left eye, $\frac{1}{10}$, Jg. 2.

He still continued the mixture, and on April 24th, 1899, the vision was: right eye, $\frac{5}{10}$ (41), Jg. 8; left eye, $\frac{5}{10}$ Jg. 2.

On June 29th, the vision was: right eye $\frac{5}{10}$ (41), Jg. 4; left eye, $\frac{5}{10}$ (41), Jg. 1.

On October 30th, the vision was: right eye, $\frac{5}{6}$ (51), Jg. 1 at 22 cm.; left eye, $\frac{5}{6}$ (51), Jg. 1 at 22 cm. He is still taking the mixture.

This case is interesting as illustrating what may be done by perseverance with appropriate remedies in cases of syphilitic disease of any part of the nervous system. This man, from being almost completely blind of the right eye, being hardly able to distinguish light from darkness, and with very defective vision in the left eye, has had his vision restored to nearly normal. All of us are no doubt familiar with cases of paralysis of the extremities from syphilitic deposit in the spinal cord, and the satisfactory way in which they clear up under the influence of mercury and iodide of potassium; but this man's case is striking from the fact that when seen, the optic discs had already commenced to pale, giving rise to the inference that some atrophy of the nerve fibres had set in; and under the circumstances, it was hardly to be expected that such marked improvement in the vision could be brought about. I may remark that in all these cases, I find much more benefit as a rule, from the administration of the double salt of mercury and potassium, than from either alone.

EXCRETION OF URINARY WATER AND UREA BY DIMINISHED KIDNEY WEIGHT.

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WALLSEND, N.S.W.

READ IN THE SECTION OF MEDICINE AT THE FIFTH SESSION OF THE INTERCOLONIAL MEDICAL CONGRESS OF AUSTRALASIA, HELD AT BRISBANE, QUEENSLAND, IN SEPTEMBER, 1899.

THE subject matter for this paper was suggested by a study of lectures published in the *Lancet*, of March 19th and 26th, and of April 2nd. They were entitled "Observations on the Pathology of the Kidneys," by Professor John Rose Bradford, Professor Superintendent of the Brown Institution.

As there were three patients in my practice with kidney weight diminished, it occurred to me that an estimation of the quantity of urine and of its nitrogenous constituents, excreted in a period extending over several weeks, might be of sufficient interest to make a suitable contribution to this section of the Congress; and it would apply to the human individual the principles laid down in the lectures quoted, and also contribute somewhat to our knowledge of the behaviour of the kidney tissue when its total weight relative to the rest of the body is diminished.

In two of the cases one kidney, i.e., one half of the total kidney weight, and in the third slightly less than one-fourth of the total kidney weight had been removed.

CASES.

1. D.F., female, *æt.* 35 years. On March 24th, 1896, the right kidney was removed. On March 16th, 1899, she was confined of a full-sized healthy male child. The estimations were made about three years after the operation, and at the time she was suckling her baby. They were begun on April 27th, 1899, and they were continued daily to June 14th, 1899, a period of exactly seven weeks.

2. W.M., male, *æt.* 20 years. On May 29th, 1897, slightly less than one-half of the right kidney was removed. The estimations, extending over a period of fifty-two days, were made two years after the operation. They were begun on April 24th and ended on June 14th, 1899.

3. J.N., female, *æt.* 56 years. On April 22nd, 1899, the left kidney was removed. The estimations were begun on the day after the operation, and they were continued for fifty-three days, or up to June 14th, 1899.

Cases 1 & 2 had time to settle into the normal condition, and they exhibit the behaviour of diminished weight of renal tissue in bodies that had assumed a normal standard after complete recovery from the affections for which they were treated. There is one apparent difference in that, the first patient suffered from disease, the second met with an accident. This is of no moment, as the excreting tissue in corpore in each case must have been of a healthy type. Both individuals were upon an ordinary mixed diet, and they carried on their customary duties.

Case 3 shows the behaviour of one kidney immediately after it had been deprived of the assistance of its fellow, in which slightly more than half the acting structure was capable of performing its function; and further, it shows how this single organ was equal to the requirements of the rest of the tissues in passing away the necessary quantity of water, nitrogenous extractives, and other solids after a somewhat serious operation.

In all the three cases the specimens examined were taken from the mixture of the total amount collected daily.

The standards of comparison used are those given in Campbell Black's "Urine and Urinary Analysis," Edition 1895. Herein the quantity of fluid excreted by the kidneys in twenty-four hours is given as 35 to 42 fluid ounces in the

female, and 49 to 52½ fluid ounces in the male. The urea elimination is stated at about 385 grains daily in the female, and 277·78 to 462·90 grains daily in the male.

The volumetric analysis of the urea was made by the hypobromite of soda process with the ureometer of Doremus.

That one kidney is capable of doing the scavenging for which two are generally provided has been demonstrated upon many occasions, in the after history of persons from whom one kidney had been excised.

The more thoroughly we realise the capacity of a diminished weight of tissue to perform all the particular requisite functions of the body which it was ordained to fulfil, with the more self-satisfaction do we attack and remove a diseased area of this tissue. The experiments in the dog have thrown much light on the physiology and pathology of the kidney. With the function of the healthy organ as an excreting tissue in some of its relations this paper is intended to deal.

Professor J. Rose Bradford writes:—"An animal (dog) with diminished kidney weight is unable to excrete a concentrated urine. . . . The urea is eliminated by an increased flow of water occurring, i.e., an hydruria follows; in this way the larger amount of urea is got rid of without the percentage in the fluid being greater. In a normal animal the urea is got rid of by the urine containing a greater percentage of it."

D.F.—In the seven weeks during which the daily estimations were made, the highest concentration was 15·25 grains of urea per fluid ounce once, 12·25 grains once, and 12 grains once; the daily average throughout the whole period was 53·51 ounces of urine, containing 7·28 grains of urea per ounce. This is comparable to the 9 to 11 grains per fluid ounce which is the approximate proportion excreted in the healthy female with two kidneys. The one kidney in this woman is able to excrete a urine in all ways similar to that we find in a normal woman.

The highest proportion, 15·25 grains per ounce, is sometimes demanded of the kidneys in the average healthy female with variations in diet, and upon the particular day of this excess there was a relative hydruria sixty-six fluid ounces of urine having been voided. The greatest quantity of fluid that was passed in any one day was, on two occasions, eighty-one (81) ounces with urea 8·25 and 5·25 grains per fluid ounce respectively.

W.M.—During the fifty-two (52) days over which the estimations extended in this case, the highest concentration was 15·75 grains of urea per fluid ounce, and with an excretion of thirty-three (33) ounces of urine.

On fifteen occasions the proportion was over ten (10) grains per fluid ounce of urine, while for the whole period the average quantities daily were forty-one (41) ounces of urine and 9·36 grains of urea per ounce. This would seem to indicate that the kidney and one half passed away a sufficiency of nitrogenous material, but that there was a slight deficiency in the quantity of fluid.

That the renal tissue left was capable of passing away more than an average daily amount of urine is evident, as fifty-three, fifty-four, and fifty-eight fluid ounces were voided on three of the days. There was no marked hydruria or polyuria.

J.N.—In the second and third twenty-four hours after the operation the highest concentration of the urine was seen, the single kidney excreting a fluid with twenty (20) grains of urea per ounce. Moreover, the largest quantity of urea excreted during any one day was four hundred and sixty grains, and that in the second twenty-four hours after the operation, with urinary water twenty-three fluid ounces; in the third diurnal period four hundred and forty grains with twenty-two ounces of water; in the following like time four hundred and twenty-five and one half grains with twenty-three fluid ounces. On the fiftieth, fifty-first, fifty-second, and fifty-third days the quantity of urine voided was respectively fifty-nine, fifty-five, fifty, and forty-seven ounces with 3·5, 4, 4·5, and 6·5 grains of urea per ounce. The average for the fifty-three days was 31·6 fluid ounces of urine with 218·24 grains of urea, or 6·8 grains per ounce. The quantity of fluid voided steadily increased and towards the end of the estimations there was practically a hydruria but not a polyuria.

The attached tables show the daily amount of fluid in ounces, of urea in grains, and the specific gravity.

In the case of Mrs. D.F. a great variation between the minimum and maximum quantities in both urine and urea is to be seen.

Under thirty ounces of urine were voided on four days, while over seventy ounces were passed on five days. During the whole period the average of 53·51 ounces per day is well over the quantity voided daily by a healthy woman with two kidneys. Compared with the two other cases the urea variations were remarkable; more than nine hundred grains were excreted on two

J. N.			W. M.			D. F.		
Weeks.	Urine in ounces.	Urea in grains.	Weeks.	Urine in ounces.	Urea in grains.	Weeks.	Urine in ounces.	Urea in grains.
I. ...	145	2375.75	I. ...	263	2543.00	I. ...	276	2537.50
II. ...	155	1554.00	II. ...	280.5	2791.13	II. ...	358	2702.00
III. ...	167	1483.55	III. ...	321	3055.25	III. ...	356	3369.00
IV. ...	202	1199.00	IV. ...	290	3498.25	IV. ...	389	2897.75
V. ...	249	1146.75	V. ...	241	2457.75	V. ...	437	3091.75
VI. ...	269	1561.00	VI. ...	301	1997.50	VI. ...	402	2171.25
VII. ...	277	1289.75	VII. ...	307	2439.25	VII. ...	404	2330.00
VIII. (4 days)	211	957.00	VIII. (3 days)	132	1194.00			
Total, 53 days	1675	11,566.80	Total, 52 days	2135.5	19,981.13	Total, 49 days	2622	19,099.25
Average per week ...	209.14	1,515.70	.....	286.2	2683.90	.....	374.57	2728.46
Average per day ...	31.6	218.24	.....	41.0	377.00	.....	53.51	389.78
Average urea per ounce ...		6.9		9.36			7.28	
Average specific gravity ...		1015.4		1020.6			1016.4	

occasions, the highest being 1006.5 grains on the eighteenth day of the estimations. Under two hundred grains were produced three times. These figures show that the single kidney is capable of getting rid of twice as much water and three times as much urea in one day as is the average for two healthy kidneys. Between the greatest and least quantities passed the chart shows considerable variations. The woman was in perfect health, on an average mixed diet, and suckling a fully-sized male child.

In the case of W.M., with his one kidney and one half *in situ*, the urinary water was under thirty ounces per day twice, and over fifty ounces six times. For the whole period the daily average of forty-one ounces is about equal to what two healthy kidneys should excrete. The urea was below 250 grains on two days, and above 500 grains on seven days. Between these two limits the quantities varied a good deal. The loss of one-fourth of his kidney weight did not materially alter the excretion of either the fluids or the solids by the renal tissue. The patient was a healthy young male, of average activity, living on a mixed diet. If estimations were made on a like man under similar circumstances, but possessing his full proportion of kidney weight, much the same

variations would be found in the daily quantity of fluids and solids passed.

J.N.—Here we have a condition more like to the dogs of Professor Rose Bradford, as the estimations were begun immediately after the operation. He writes: "All partial nephrectomies, single or double, slight or extensive, increase the amount of urinary water, to different degrees, it is true. The amount of urea is not increased by either single partial nephrectomy or by double partial nephrectomy, or yet by the removal of one kidney and a portion of the other, provided always that at least one-third of the original total kidney weight be left to the animal. . . ."

In J.N. at no time during the first five weeks did the urinary water reach forty ounces in one twenty-four hours, the nearest to that amount being thirty-nine ounces passed on the thirty-fifth day. This does not agree with the hydruria found in the dog. The urea for the first twenty-four hours stood at the normal healthy average; during the second, third, and fourth daily periods it was about twice the normal amount per ounce of urinary water, but only a little above the total required to be excreted daily by a healthy female with two kidneys. This differs from what happened in Professor Bradford's dogs, and shows that

J. N.				
Date.	Oz. of urine.	Grains of urea per oz.	Total grains of urea.	Specific gravity.
April 23	16	10	160	1027
24	23	20	460	1026
25	22	20	440	1028
26	23	18.5	425.5	1026
27	20	14.5	290	1024
28	20	14	280	1024
29	21	15.25	320.25	1024
30	20	12.5	250	1023
May 1	20	12.25	245	1024
2	23	12.75	293.25	1020
3	22	12.75	280.5	1022
4	24	8	192	1015
5	23	7.5	172.5	1016
6	23	5.25	120.75	1011
7	24	9.2	220.8	1018
8	25	7	175	1014
9	25	9.25	231.25	1018
10	23	13	299	1018
11	20	13.5	270	1020
12	25	8.5	212.5	1016
13	25	3	75	1010
14	23	6	138	1014
15	25	5	125	1010
16	23	6.25	206.25	1012
17	30	8	240	1016
18	30	4.5	135	1014
19	35	5.25	183.75	1012
20	36	4.75	171	1009
21	30	4.75	142.5	1010
22	34	4.75	161.5	1011
23	35	4	140	1014
24	35	4.75	166.25	1014
25	38	4.5	171	1009
26	38	5	190	1012
27	39	4.5	175.5	1014
28	40	5	200	1010
29	42	6	252	1015
30	43	4	172	1011
31	30	2.25	157.5	1013
June 1	35	6	210	1014
2	32	8.25	264	1017
3	47	6.5	305.5	1016
4	39	5.75	224.25	1016
5	40	6	240	1014
6	34	4.75	161.5	1011
7	28	6	168	1013
8	40	4	160	1010
9	51	3.5	178.5	1010
10	45	3.5	157.5	1010
11	59	3.5	206.5	1011
12	55	4	220	1012
13	50	4.5	225	1014
14	47	6.5	305.5	1016

W. M.				
Date.	Oz. of urine.	Grains of urea per oz.	Total grains of urea.	Specific gravity.
April 24	40	10	400	1020
25	40	8	320	1021
26	38	8.5	323	1023
27	40	11	440	1025
28	30	11.25	337.5	1027
29	40	9	360	1024
30	35	10.5	367.5	1026
May 1	38	8.25	313.5	1022
2	43	9	387	1018
3	38	10	380	1022
4	40	12.5	500	1027
5	30	12	360	1027
6	40	10	400	1024
7	51.5	8.75	450.625	1020
8	38	11.5	437	1023
9	51	10	510	1020
10	45	9.25	416.25	1020
11	40	10	400	1020
12	48	8	384	1018
13	41	8	328	1020
14	58	10	580	1016
15	53	10	530	1019
16	47	13.5	634.5	1024
17	48	12	516	1022
18	35	14	490	1026
19	32	13.5	432	1024
20	47	8	376	1017
21	33	15.75	519.75	1026
22	32	12	384	1024
23	28	11	308	1026
24	39	7.25	282.75	1016
25	36	11.5	414	1023
26	27	9.5	256.5	1018
27	39	7.5	292.5	1018
28	40	13	520	1026
29	39	6.5	253.5	1016
30	38	8.75	332.5	1016
31	39	7.25	282.75	1018
June 1	46	6.5	299	1015
2	45	4.75	213.75	1014
3	46	4	184	1010
4	48	9	432	1026
5	46	5.75	264.5	1012
6	40	8.25	330	1020
7	39	7.75	302.25	1019
8	44	9.25	407	1020
9	40	9	360	1020
10	56	5	280	1014
11	42	11.75	493.5	1025
12	54	6	324	1015
13	38	10	380	1024
14	40	12.25	490	1026

immediately after removal of one kidney in the human subject the kidney left *in corpore* is capable of excreting a somewhat concentrated urine. During the sixth and seventh weeks the urinary water voided kept well up to a healthy average, while on the four days of the eighth week the quantity was about ten ounces above the average.

In these same periods the urea was about one-half of that usually excreted by two healthy kidneys. The table as a whole shows a steady increase in the quantity of urinary water. At first, when this was small in amount, the patient had a low tension pulse, she was unable to take much fluid wherewith to fill the blood vessels, and a diminution in the filtering processes followed. After major operations there

MRS. D. F.

Date.	Oz. of urine.	Grains of urea per oz.	Total grains of urea.	Specific Gravity.
April 27	77	12	924	1021
28	28	7.5	210	1015
29	28	12.25	343	1024
30	46	8	368	1013
May 1	35	7	245	1014
2	27	7.5	202.5	1017
3	35	7	245	1014
4	53	7	371	1014
5	51	6.017	382.5	1014
6	58	6.25	362.5	1016
7	62	8.75	542.5	1022
8	52	7	364	1014
9	49	10.5	514.5	1022
10	33	5	165	1012
11	65	8.25	536.25	1019
12	65	5.25	341.25	1010
13	45	11	495	1022
14	66	15.25	1006.5	1026
15	28	5.75	161	1011
16	44	12	528	1018
17	43	7	301	1012
18	65	9	585	1022
19	54	4.75	256.5	1010
20	63	5.75	362.25	1014
21	53	10	530	1022
22	42	9.25	388.5	1022
23	66	6	396	1014
24	46	8.25	379.5	1028
25	36	6.5	234	1022
26	56	7.5	420	1016
27	55	3.5	192.5	1013
28	81	8.25	668.25	1020
29	72	7	504	1015
30	76	8.5	646	1020
31	61	7	427	1015
June 1	40	5.25	210	1012
2	36	8.75	315	1021
3	67	4.25	284.75	1010
4	47	4.75	223.25	1015
5	81	5.25	425.25	1010
6	64	6	384	1012
7	47	7	329	1015
8	57	5.25	299.25	1011
9	66	6.5	429	1014
10	67	5.25	351.75	1011
11	55	8.5	465.5	1023
12	62	3.5	217	1010
13	59	8.5	501.5	1022
14	38	7	266	1015

is usually wasting for the first few days; this is probably accompanied by an over-production of nitrogenous extractives in the tissues and blood, thence moving onwards to excretion through the kidneys. After the fourth day the urea fell to a normal degree, and only three times during the subsequent analysis was it up to three hundred grains in the twenty four hours. The patient put on flesh and soon regained more than her accustomed vigour.

In the *British Medical Journal* of July 29th, 1899, Dr. W. L. Bell, of Lowestoff Hospital,

England, reports a case of abdominal nephrectomy for renal calculus at the end of the article he writes:—"Estimations of Urine.—During the first twenty-four hours fourteen ounces of highly albuminous urine were excreted, but after this it remained free from albumin, and . . . during the second twenty-four hours there were fifteen ounces, next three days twenty-eight ounces each day; after which the amount passed generally varied from thirty-five to forty-five ounces. Careful measurements extended over a period of eight weeks."

Other references to the subject matters of this paper will be found as follows:—*Lancet*, February 18th, 1896, p. 417, "Salford Royal Hospital Nephrectomy, under Dr. Herbert Lund; *British Medical Journal*, October 17th, 1896, p. 1100, Dr. Oscar Bloch, "A case in which half the kidney, invaded by morbid growth, was removed, with remarks on the conservative surgery of the kidney; *Lancet*, October 31st, 1896, p. 1229, "Abdominal Nephrectomy," by F. C. Wallis, at the Clinical Society of London.

In further illustration of the cases forming this article, a statement of weekly averages of urinary water and urea excreted are here shown.

The following conclusions appear to me to be justified:—

1. If one kidney be removed, then three years subsequently the healthy kidney *in situ* will excrete more than the average quantity of urinary water produced by two normal kidneys.

2. This same kidney will excrete per fluid ounce of urine and per diem the average amount of urea that would be produced by two healthy kidneys.

3. If one-half of one kidney be removed, then two years afterwards the urine voided will be the same in quantity as if two healthy kidneys were present.

4. The loss of the half of one kidney will cause no increase or diminution in the percentage or total amount of urea excreted.

5. If one kidney be removed, then the quantity of urinary water excreted by the other during the seven weeks immediately succeeding the operation will be below the average daily amount.

6. The urea produced by this one kidney will be less than the average proportion usually seen as the result of the work of two healthy kidneys, but probably not below the average excreted by two healthy kidneys from an individual recovering from a serious operation.

From the standpoint of the practical surgeon there is one important fact brought prominently forward in Professor Bradford's experiments and lectures. They teach us:—Firstly, that in the dog two-third's of the total kidney weight can be removed with impunity, and the one-third remaining is consistent with the prolonged and healthy existence of the animal; and secondly, that there is a limit between the one-third and the one-fourth of the total kidney weight beyond which, if excision be practised, the kidney tissue left is not sufficient for the sustaining of life, as the animal will rapidly emaciate and die; not, however, from uræmia, as even with one-tenth of the total kidney weight an hydruria and a polyuria immediately followed. Any one of us may have the question brought before him in a case of kidney disease or a tumour growth of renal tissue, as to how much of the kidney substance may be with safety excised. The general trend of all these observations is in the direction of Professor Rose Bradford's results, that one-third of the total kidney weight in the human being would be as capable of sustaining a prolonged and healthy life as he found to be the case in the dog.

For the preparation of the accompanying tables, and the working out of the averages and totals, I am much indebted to Dr. F. H. Cox, a graduate of the Sydney University.

NOTES ON THE EVOLUTION OF THE EYE.

By G. AFFLECK SCOTT, M.B., CH.M., BALLARAT, VIC.

I MUST apologize for the absence of practical utility in my subject in that it does not touch either disease or its cure, but hope that the interest of the question itself, however meagrely it be handled, may justify its inclusion among the other more useful subjects on our Society's list.

I purpose running over a few of the facts of the comparative anatomy of the eye, and then looking at their bearing upon the question of evolution.

The lowest type of organ representing an eye is as you know found in the lowly hydrozoa, of which the little clavate is a specimen. This polyp has at the base of each of its delicate arms a horse shoe shaped spot containing a well-developed "ocellus," i.e., a ring of pigment encircling a modification of ectoderm to represent cornea and lens and sometimes a gelatinous

tissue below equal to the vitreous humour. That, however, is not the lowest type of eye, for the clytia, one of a higher order than the previous, possesses only a number of brightly coloured spots round its circumference, which are a still lower form of eye (if we may signify it by the term) than the ocellus of the clavate. Then, as we advance to the medusidæ—the bell(e)s of the southern seas—we find round the circumference of their nectocalyx small "vesicles" (or primitive ears), and beside them a series of little aggregations of pigment enclosed in distinct cavities which represent eyes, and are very like the "ocelli" mentioned. In the higher order of the lucernariidæ we find the so-called "lithocysts," or a combination of vesicle and pigment spot, a sort of amalgamated eye and ear which is a retrograde step on the preceding type. And these humble beginnings are the measure of the visual power of the coelenterata. Whether they deserve to be called eyes at all is a moot point, as we do not know whether the animal in any way sees with them; yet they undoubtedly, I think, are sense organs, and they are the representatives of what in the higher forms are eyes, and probably enable the organism to distinguish between light and darkness.

When we advance to the echinoderms, we get something more definite in the way of eyes, for some of them possess little ocular plates, in all probability for the reception of "ocelli," and others show their sensitiveness to light by crawling away from a light thrown upon them, whether from above or below.

The three divisions of the annulosa come next in order, and here we find a great variety of type. In the scolecida, for example, some orders have nothing to show in the way of eyes (tænia, geophila, nemertida, nematoids, etc.), others range up to 30 to 50 eyes (polycetes), while the most beautiful and active and (Goose says) intelligent of them all, the class of rotifers, have only two bright-red pigment spots beside a pair of large tactile projections. The second division of the annulosa, the anarthropoda, again give us a variety of type, e.g., the gephyrea has no eyes (probably); the oligochaeta have no eyes but a thickening of skin where the eyes ought to be, and they are very sensitive to light; the chaetognatha have only darkly-pigmented imperfect eyes; the errantia two well-developed ocelli, but the annelids in this same sub-class have five pairs of well-developed ocelli towards the head end, and show the marked advance of having these eyes connected by distinct nerve filaments to the pre-oesophageal ganglion which connects again

with the ventral ganglionic nerve-chain. Then of the "arthropoda," i.e., third division of the annulosa, the crustaceans offer a still more varied assortment of eyes, from the nauplius of the epizoa with its single central ocellus developing later two lateral compound eyes (which again later disappear) up in type through the large median compound eye of the daphne to the large kidney-shaped compound faceted eyes of the trilobite (one of the earliest known fossils) and the combined double pair of eyes (two simple ocelli and two compound faceted eyes) of the xiphosura. All these are found in the two lower divisions of the crustacea; while the higher crustaceans, in addition to showing all grades from clusters of simple ocelli (crumacæ) up to the highly-developed compound eye, exhibit very beautifully (in some of the edriophthalmata) the passage from a simple to compound eye, the cornea being in two layers the inner of which only is faceted, while the outer is smooth and the pigment covering invests the whole, while in the compound eye the outer layer of the cornea also is faceted, and each facet, lying on its own cone, is invested by its own separate pigment layer, the whole being in contact at its distal end by means of nerve filaments with an expansion of the optic nerve, which is practically a retina. The crustacea also show (decapoda) compound eyes with stalks developed, and occasionally the stalks can be folded up and the eye put out of harm's way—so apparently a beneficial contrivance that it seems strange that nature has not more often availed herself of it.

Moving on to the arachnida, we find the eyes varying greatly as to number and position, but they are all (so far as I remember) simple-eyed forms, not compound. The myriapoda, the next division of the arthropoda, have for the most part simple ocelli, s/s in pairs, s/s in rows, s/s in clusters, but also show a few examples of compound eyes like the crustacea, while the last division of the arthropoda, the "insecta," or as I suppose we should call them, the "hexapoda," show again an extensive variety—from no eyes at all (some coleoptera, lepidoptera, and neuroptera), then a single pair of ocelli (winged termites and froghoppers), then a number of ocelli (some lepidoptera and spiders), up to the compound faceted eye (some lepidoptera and coleoptera), and also combinations of compound and simple eyes (some heteroptera, hymenoptera, wasps and bees, neuroptera, dragon flies, and orthoptera, crickets, locusts, etc.), while some cockroaches have two large compound eyes, and beside them a pair of not ocelli, but simple pale, soft pigment spots.

Some insects have a sort of semi-circular cup which is a kind of retina. Some ants also evince a decided antipathy to certain colours, violet being the most objected to.

Passing from the annulosa to the molluscs, we find they contain examples again of almost all varieties. Some of the polyzoa have a distinct nervous system, but without eyes; some of the tunicata brachiopods and lamellibranchs have simple pigment spots like the medusæ (e.g., the scallop-shell with a fringe of them round the edge of its mantle); and some have simple ocelli, while the strombidæ shew the great advance of having eyes which are placed at the end of long cylindrical stalks, and are better developed than those of some fishes. The decapoda again shew a simple form of eyelid in the shape of a transparent thickening of the skin covering the eye while others have their eyes unprotected and in contact with the water. We noted the essentially small difference between the ocellus and the compound eye, and how easy the transition is from the one to the other, and now the molluscs supply us with a similar object lesson as the relation of the compound eye to that of the vertebrates. Carrière's two great divisions of eyes are, of course, (1) those which do not give an actual picture of external objects—this includes the simple and the compound eyes we have considered, the latter of which see by the rays from different parts of the object being pieced together like a mosaic at the retinal end of the cones or tubes; (2) the refractive eye which forms an actual picture of external objects on a retina, cornea, aqueous, lens and vitreous all assisting in the process. But the molluscs show types, for example, of forms with an iris and lens with the other parts less developed, and, in the case of the snail, an eye which has simply a thinning of the epithelium to represent cornea, and no lens, but a large vitreous chamber, a pigmented membrane in front of the retina representing the choroid, and the retinal cells thickly and well developed. And this leads us up to the vertebrate eye itself, which is, probably, never absent, generally well formed, though in some fish it is very ill-developed. I have not time to enter upon the question of the various differences in shape, size and mechanism, e.g., the lancelet's eye as simple as the leech's (simply an eye-speck), the more advanced form in lepidosiren, up to the well-developed organ of the sword-fish. Among the reptiles the proteus with its pigment spot and tiny lens, the closed lidless conjunctival sac of the serpents, up to the complex eye of the crocodile. The mechanism of accommodation in the birds and

the variety of detail in the higher vertebrates—thinking the types in the invertebrate kingdom more germane to the subject, I have spent the time on them. Now, before passing to the relation of this to evolution, I should like to recall the process of the embryonic development of the vertebrate eye, some of whose facts exemplify the likeness between ontogeny and phylogeny.

The eye, as you know, is developed from the ectoderm and mesoderm only (possibly the lower vertebrate eye from ectoderm alone). The anterior end of the medullary canal, the cerebro-ocular, shows in the amphioxus a pigmentary screen (which reminds one of the jelly-fish's pigment spot), and is the representative of the first trace of the choroidal epithelium. The anterior end of this medullary groove begins to widen out laterally before the groove closes, and this lateral widening forms the two primitive optic vesicles which with the optic stalk are clearly seen on dissection of the human embryo by the twelfth day, although the external bulging corresponding to them is not made out till about the eighteenth. Then the primitive optic vesicle on either side projects forwards and invaginates in its centre a circular piece of ectoderm which becomes the secondary optic vesicle, or "optic cup" as it is called. The outer end of the (primary) optic vesicle becomes the retina and choroid, while the invaginated ectoderm becomes the lens. The retina then retreats from contact with the lens and thickens into its various layers, while the optic nerve develops independently along the optic stalk. The vitreous is an intrusion of connective tissue through the choroidal fissure at the under side of the optic cup and fills up the space between the lens and receding retina. The eyes are, all this time, lateral in position and begin to swing round towards the front between the fifth and sixth weeks. The sclerotic and cornea develop from mesodermic cells, while the conjunctival and corneal epithelium are of course ectodermic. Then the (mesodermic) iris and ciliary process grow into place; the latter secretes the aqueous humour, and the eye by the third month is a developed organ.

As to the bearing of the foregoing upon the question of evolution. Students of Natural History have offered us three different views:—

(I.) The evolutionary view, that the eye must have originated and developed by "infinite automatic adjustments."

(II.) The view of John Stuart Mill (in his own words), "Sight being a fact not precedent

but subsequent to the organic putting together of the eye, it is a legitimate deduction that, not sight but an antecedent idea of it must be the efficient cause. But," he adds, "this at once makes the origin as proceeding from an intelligent will."

(III.) The theologian's view as stated by the Rev. Joseph Cook, who, basing his arguments on Spencer's philosophical canon that "any proposition of which the opposite is inconceivable must be held to be true," holds that "utter inconceivability inheres in the proposition that the adaptation of part to part in the eye can be produced without the preceding idea of sight" and that, therefore, sight *per se* proves an intelligent Designer.

Now in matters scientific if two opposing conclusions are asserted, it means one of three things:—(1) Imperfect data (2) Illogical reasoning, or (3) Biassed reasoner. And the great difficulty in all evolutionary arguments is, it appears to me, that even great men frequently afford an example of these three faults. (1) A specialist is always apt to reason from his own specialty, which means imperfect data. (2) The logical faculty does not always accompany other qualifications for scientific investigation, and that means illogical reasoning. And (3) The man whose object is either to prove his religion right (as is the case with many theological writers on science) or to prove somebody else's religion wrong (as is the case with a number of evolutionist writers) furnishes an example of the third source of fallacy (*i.e.*, biassed reasoner.)

This last seems to me to fall by the weight of its assertion. A study of the mechanism of the human eye alone might excuse the statement, but in the face of the existence of all the various types from the human eye down to the pigment spots of the medusa, the assertion that "utter inconceivability inheres in the view that the adaptation of part to part in 'that pigment spot' could be produced without the preceding idea of sight" may be dismissed from consideration.

As to the second view, if Mill's data are correct, his conclusions are pretty certain to be correct also, and the question is:—Are the data here correct, *i.e.*, is sight a fact subsequent to the organic putting together of the eye? It is a very difficult question to answer. It is, of course, not a precedent fact, but even Mill here seems to have forgotten that "non-precedent" and "subsequent" are not synonymous; "non-precedent" may be either "subsequent" or "contemporaneous." Now, with all due respect to Mill, it seems to me not justifiable to make

the assertion that sight is a fact subsequent to the formation of that pigment-spot. That it may be so is undoubted but the other alternative is tenable also:—That sight originally is a localisation in the organism's pigment spots of the effect of waves of light upon the organism's protoplasm, and, although it may be a little difficult to understand why light waves should make an eye rather than anything else, that difficulty applies to every other organ also. It is quite conceivable that that pigment spot was the result of these light waves acting on the protoplasm of the organism, and "sight" a *parri passu* correspondence between cause and effect. The *facta* therefore of the organ and function of sight, although perhaps more striking than the rest, do not differ from or settle the question better than *e.g.*, a bird's wing implying an antecedent idea of flight or a lung an antecedent idea of respiration. And therefore I think it a begging of the question equally on both sides to assert that sight *per se* either necessitates or excludes an intelligent Designer.

Of the two possibilities, then, the one is that originally waves of light caused a pigment spot modification of the protoplasm of an organism, like a jelly-fish, that those jelly-fish survived which had the more useful of such spots either in number or position, that those surviving forms transmitted their advantages to their descendants, that those descendants by the slow occurrence and slower transmission of fresh, useful, accidental variations developed in succession the ocellus, the clusters of ocelli, the compound faceted eye, the combination of both, the semi-refraction organ of some insects, and ultimately the fully-developed molluscum, mammalian and human eye.

The other possibility is that some Intelligence with an antecedent idea of sight effected such a modification of the protoplasm of the organisms (of which It was also the efficient cause) as would answer to the action of waves of light, that It effected in different types of animal different types of protoplasmic change, and that the progress in type from jelly-fish pigment spot to mammalian eye is the developmental expression of an idea of sight antecedently present to that Intelligence.

Which of these two possibilities offers the true explanation, it is, I think, difficult from a study of the eye itself to dogmatically decide. Many of the facts of course are such as would be expected under either explanation, and if we start by assuming one and excluding the other it is easy to find facts which confirm our

assumption; and the line of reasoning has to be not how many facts can be explained on one or other hypothesis, but whether there are facts which one or other hypothesis does not explain.

I shall just select two or three points as examples of others:—

It is difficult, for example, to understand either how the action of light waves could at the same time cause both the outgrowth of the primitive optic vesicle and the invagination of the ectoderm which forms the lens, or how the original possessor of such an incipient invagination (before it had formed the lens) should be any better equipped than his comrades in the struggle for existence on account of a modification whose usefulness only comes into existence after the structure has fully developed.

Again, Professor Ryder, for example, explains the fact of the low form of the eye of "amphioxus" (lower than some inferior invertebrates) not as an example of reversion to type, which it of course is not, but by the fact of the tissues surrounding the eye being so transparent that the animal does not need the fully-developed refractive organ. But that implies very dubious views of the function of sight and is an ignoring besides of the facts exemplified by, say, the crustacean "epimera" whose tissues are as transparent as the lancelet's and which nevertheless possesses two enormous eyes of (for its class) a high type.

Again, there is the lack of a starting-point from which to evolve, and Ayers, for example, has supposed the vertebrate specialised organ to be evolved from the median eye, which is more or less developed in some batrachians, etc.; but the "proto-tracheata" peripatida, the supposed ancestors of the tracheata and later the vertebrates, possess, according to Pocock, two lateral eyes and no median one. Or, on the hypothesis of either the action of light waves or descent with useful modifications alone, it is difficult to understand how the original parent jelly-fish got their pigment spots moved to the front instead of remaining circularly disposed round their mantles, and how, if the anterior position or numbers of eyes or high type of eyes were to be of such benefit, those forms which did not possess these advantages at all have persisted without harm from the palaeozoic age to the present and flourished as well as their comrades who developed the beneficial characters.

Again, there is the lack of steady progression of type of eye corresponding to the advance in zoological type, the crustaceans showing a variety of eye ranging from compound faceted down to none at all, the hexapoda the same;

the mollusca range from a type of eye higher than some of the vertebrata down to also no eyes at all.

And as regards the fossil evidences, there is at the present unanswered objection to the first of the alternative views, viz., that Barrande's investigations in the oldest fossiliferous rocks shew the presence there of blind crustaceans side by side with those possessing perfectly-developed compound faceted eyes of highest type, six varieties of type I think there are, just as at present; that the forms with either no eyes or with eyes of low type are no older in deposit than those with the perfect eyes; and further that in the stratum below that containing these perfect eyed forms there are no evidences of organic life at all.

Any conclusion based on lack of fossil evidence may of course at any time be upset by the discovery of fresh fossils, so that such conclusions must be always provisional. Some value however, attaches to this piece of evidence from the fact that the extent and thoroughness of the investigations carried on might be reasonably expected to have unearthed some evidence of earlier fossils had such existed.

Facts not explicable on the second hypothesis we are considering are of necessity almost impossible to find, as the assumption of an antecedent intelligence includes all the methods of descent with modification, survival of the fittest, useful variation, etc, and, therefore, includes all that the second hypothesis can validly explain, while it also offers an explanation of the various facts not explainable of with difficulty explainable by the other view alone, as those points I have referred to and others not mentioned; for example, the broad fact of there being a line of progress from pigment spot to vertebrate eye, whose existence and development (not to speak of the perfection of the finished article) it is difficult to attribute to either the action of waves of light or an accidental occurrence of variations without any cause, yet moving always in the direction of this perfect organ.

While, therefore, I do not think that the eye *per se* allows of a dogmatic assertion in favour of the second of the two possible causes under consideration, yet I think that the facts and considerations referred to point to the conclusion that the efficient cause of the function and varieties of the organ of sight is, as John Stuart Mill infers, some Intelligence with an antecedent idea of sight rather than as Haeckel would hold, a purposeless and haphazard automatic response of protoplasm to light.

OBSTRUCTION TO RIGHT BRONCHUS BY SMALL CIRCULAR DRESS BUT- TON.

By H. T. S. BELL, L.R.C.P. LOND., F.R.C.S.
ENG., BRISBANE.

M.M., female, age 7 years, admitted to the Hospital for Sick Children, Brisbane, October 23rd, 1897.

History on Admission.—Cold for three weeks. Three (3) days before admission the child was seized with coughing and choking, and complained of pain in the head and stomach, and remained in the same condition till admission.

Condition on Admission.—Lungs: Impaired resonance at both bases, with signs of bronchitis. Heart and other organs: Normal.

Evening.—Temperature, 101°; pulse, 120; respiration, 56. Urine: S.G. 1028 acid; trace of albumen present.

During the first few days following admission the child was restless at night, suffered from attacks of coughing, and complained of a choking sensation. She brought up quantities of frothy, sometimes blood-stained, sputum, and was sometimes blue during an attack of coughing.

Ten (10) days after admission there were signs of solid lung at the base of the right lung.

Evening.—Temperature, 102.8°; pulse, 148; respiration, 44.

Seventeen Days After Admission.—Right side of chest dull on percussion, more marked at the base; bronchial breathing at right apex; breath sounds at the base distant; tactile vocal fremitus and voice sounds diminished at right base; right side explored with needle; no fluid found.

Heart.—Harsh, blowing, systolic bruit audible over the base and behind along the posterior border of the left scapula. While being examined child made the statement that she thought all her trouble was due to a button she had swallowed some months before admission. The child's story was not verified by the mother. The mother stated that the child had complained about three months before of having 'swallowed a button,' but no history of choking could be obtained, and the mother rather discredited the child's story. From November 12th to the end of the month patient gradually improved. Temperature normal in the morning, and only slightly varied at night; pulse 112-120, and respiration 20-30; cough less, and child slept comfortably. The condition

of right lung improved. Towards the end of November child allowed up for a few hours in the afternoon.

December 7th.—Child was walking down the ward when she was seized with a sudden attack of dyspnoea, became blue, and gasped out that she was choking. Child breathed with difficulty, but without struggling. Breathing became more distressed, and child died about five minutes after onset of attack and before medical assistance could be obtained.

Post-mortem Examination.—Pleura adherent all over right lung. Right lung solid and fibrous. Right bronchus considerably dilated from bifurcation of trachea to commencement of its branches. Some slight superficial ulceration of the mucus membrane. Small dress button found lying in the left bronchus.

PROCEEDINGS OF BRANCHES.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE regular general meeting of the Branch was held at the Royal Society's Room on Friday, 24th November, 1899, Dr. E. T. Thring (President) in the chair. There were also present: Drs. Gordon MacLeod, Clarence Read, Newmarch, Manning, Jenkins, Chisholm, Clubbe, Litchfield, Lawson, Bennet, Megginson, West, R. H. Jones, Arthur, Pockley, Goode, McDonagh, Binney, Taylor Young, McMurray, Crago, Hankins, Sinclair Gillies, Worrall, Kyngdon, W. H. O'Neill, George Armstrong, Spencer, Coutie, Borke, G. A. Marshall, Kirkland, Browne, Brady, Ludowici, Neill, Pain, Sawkins, Maitland, J. A. Dick, Barrington, Clark, Gledden, A'Beckett, McCarthy, Gordon Craig, and Pilkington.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the election of the following gentlemen:—Drs. Lipscomb and Rowlands, and the nomination of Drs. W. J. Munro and A. E. Walsh.

Dr. GORDON MACLEOD (for Dr. Evans) showed a case of persistent eversion of the upper eyelids, with great hyperplasia and prolapse of the conjunctivæ. The patient, a child of six, was admitted into Moorcliff eighteen months previously. From the history obtainable the condition appeared to have come on gradually, and there was no evidence of antecedent ophthalmia in any form. An excellent cast (taken on admission by Dr. L. H. Harris, Senior Resident Medical Officer, Sydney Hospital) was also exhibited, and is a faithful record of the striking appearance at that time. The conjunctivæ of the upper lids resembled watch-pockets turned outside in, the lower borders hanging nearly an inch below the ciliary margins of the lower lids. The bulbar conjunctivæ were free from injection, the lower lids normal, and there was little or no discharge from the eyes. When the masses were raised from in front of the eyes the vision was good. Under treatment the swellings have slowly receded, but there is still some eversion.

Dr. E. J. JENKINS read some notes on "A Case of Obscure Nerve Disease," and exhibited the patient, who was examined by the members.

The discussion on Dr. Lawson's resolution,—"That the British Medical Association should recognise the North Sydney United Friendly Societies and their medical officers, and that their names be erased from the ostracised list of the Association," was carried on by Drs. Bennet, Newmarch, Dagnall Clark, and Clarence Read.

Dr. NEILL raised a point of order as to whether, in view of the resolution passed by the Branch, the motion by Dr. Lawson was in order.

The PRESIDENT, after some discussion, ruled the motion out of order.

Dr. GOODE gave notice that he would, at the next meeting of the Branch, move the rescission of the resolution passed in November last year dealing with this question.

Mr. HANKINS exhibited some appliances used in the treatment and diagnosis of aural cases.

The regular monthly meeting of the Branch was held at the Royal Society's Room on Friday, 8th December, 1899. Dr. E. T. Thring (President), in the chair; Drs. Coutie, Abbott, Quafe, Clark, Clubbe, Crago, Worrall, Goode, Rennie, Newmarch, Todd, McDonagh, Arthur, Fairfax Ross, G. L. O'Neill, R. H. Jones, Gledden, Pope, Sawkins, Barrington, Litchfield, Bennet, Kyngdon, Megginson, Sinclair Gillies, Palmer, Gordon Craig, Failes, Mills, Hinder, Kirkland, Robertson, Mellroy, W. J. Munro, Taylor Young, G. H. Taylor, Kenna, Marshall, Paton, Marano, Warren, A'Beckett, McCarthy, McMurray, and Graham.

The PRESIDENT apologised for the absence of the hon. secretary, who had been called to Brisbane.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the election of the following gentlemen:—Dr. W. J. Munro, Sydney; Dr. A. E. Walsh, Marriickville.

Dr. WORRALL exhibited a specimen—myomata complicating pregnancy, and made some remarks on the operation. (See p. 534).

Dr. TAYLOR YOUNG said that having had the good fortune to be present when Dr. Worrall operated in this case he could not permit the occasion to pass without complimenting him upon the result. It would have been an extremely difficult case under any circumstances or by any method, but he could not help thinking that it was rendered much more "getatable" by Professor Watson's method. The difficulty undoubtedly was the delivery of the tumour, owing to the large cervical myoma found occupying the true pelvis. This was just the class of case in which most difficulty was found, and which operators disliked having to tackle. However, by Professor Watson's method that dread was to a large extent overcome. He would have been glad had Dr. Worrall offered any remarks as to pregnancy having occurred in a uterus such as this, in which there was practically no normal tissue remaining.

The PRESIDENT (Dr. Thring), made some remarks, and Dr. Worrall replied.

Dr. GOODE moved, and Dr. McDONAGH seconded,—"That the resolution passed by this Branch at the meeting held on November 25th, 1898, be rescinded, as being beyond the scope of the British Medical Association, and that the vote of every member of the Branch be taken on the question by ballot or by proxy."

Drs. Todd, Newmarch, Taylor Young, Arthur, Crago, Gregory, O'Neill, and Gordon Craig took part in the discussion.

Dr. MEGGINSON proposed an amendment, which was not seconded.

Dr. GOODE replied, and the resolution was negatived by a large majority.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE monthly meeting was held at 8 p.m. on Thursday, November 30th, 1899, at the University. Present: The President (Dr. Marten), Drs. Lendon, Swift, Singleton, Brummitt, Harold, H. Wigg, Todd, Good, J. A. G. Hamilton, Fischer, Hone, Morgan, H. Evans, W. Verco, Poulton, A. Wigg, Watson, A. A. Hamilton, T. K. Hamilton, Michie, Symons, W. T. Hayward, Cavenagh-Mainwaring, and the Hon. Sec. (Dr. J. B. Gunson). Visitor: Dr. F. Magarey.

Dr. T. K. HAMILTON exhibited the following:—

EXHIBITS.

I. Cystoma of the Inferior Turbinate in a Young Girl aged 15 years.—The growth was found springing from the posterior third of the left inferior turbinate, and hanging down into the naso-pharynx, the greater part of which cavity it filled.

II. Large Pedunculated Papilloma of the Velum Palati.—The patient was a lad aged 14 years. The growth sprang from the velum close to the left side of the base of the uvula, and, from its size, was causing considerable irritation of the throat.

LIVING EXHIBITS.

I. A boy aged 8 years, for whom a palate-plate with an obturator attached to it for the naso-pharynx had been fitted to prevent the recurrence of dense cicatricial contraction of the velum, which had originally resulted from deep ulceration of the pharynx in scarlatina. The plate is provided with an opening for the uvula, and is answering the purpose admirably.

II. Almost Complete Iridodialysis in One Eye and Partial in the Other, from a Dynamite Explosion.—On the right side only about $\frac{1}{2}$ of the lower part of the iris remains attached, and the upper part, when first seen, was lying in loose folds in the anterior chamber. The cornea is transparent, and the eyeball otherwise uninjured, except for superficial opacities of the lens. The removal of the loose iris raised the vision from $\frac{1}{80}$ to $\frac{1}{20}$.

III. Imperforate Lachrymal Openings in One and Enlarged Openings in the Other Eye.—The boy, aged 11 years, has suffered from lachrymation of left eye since birth. There is not a trace of the puncta on this side, and on the other side they are about twice the usual size. There is no abnormal condition of the bony surroundings, nor of the interior of the left nostril.

IV. Cicatricial Stricture of the Oesophagus.—This young man, aged 19 years, accidentally swallowed, about eighteen months ago, some horse liniment (probably composed of lin. terebinthinæ and liq. ammon. fort.) He had very great dysphagia and odynophagia at the time, which continued during the inflammatory period and then abated, but the dysphagia returned later on as the cicatricial contraction advanced on healing of the ulceration. Only No. 2 or 3 Mackenzie's bougies could be got down when he first came under treatment, and for several weeks the passage of these had to be discontinued and feeding by the rectum resorted to. He became very emaciated, and had to keep his bed on account of extreme weakness. After a time he began to improve, and gradual dilatation of the stricture has been continued. No. 8 now goes down freely. He has been taught to pass the bougies himself; can swallow any kind of semi-solid food, and he is quite fat and strong. The seat of the

stricture is 32.5 c.m. from the incisor teeth, i.e., about 8.5 c.m. from the stomach. This is just the beginning of the narrowest part of the tube, which in the adult at this point usually measures only 12 m.m. in diameter.

V. Traumatic Symblepharon-Pterygium, and New Method of Treatment.—O.T. got blow on left eye with stick six years ago which lacerated the lower lid and inner side of eyeball. A dense symblepharon attachment of lid to the cornea resulted. This has been twice operated upon, and in each case new tissue was interposed between the fornix and the cornea. The first time conjunctival flaps with pedicles from above and below were used, and on the second occasion mucous membrane from the lip was inserted. Both operations have failed to improve the condition. Now an opening has been tunnelled under the base of the growth, into which a piece of lead wire has been inserted, and it has been already four weeks *in situ*. The growth will soon be removed. This procedure has in similar cases been found to successfully prevent re-attachment.

Dr. WIGG demonstrated Noble Smith's "Spinal Support."

Dr. HUMPHREY MARTEN showed a case of morphea in a young lady. The patch followed the course of the sixth left intercostal nerve. It had been noticed about two months. No other patches were present.

Dr. MARTEN mentioned a case he had seen when House Physician at Addenbrookes Hospital, Cambridge, where there was a tumour as large as an adult's head in the region of the sigmoid flexure in a young man, aged 25, who had suffered from constipation since childhood. Per rectum a large mass of fecal matter was felt, of stony hardness. The patient refused treatment, and the after history was unknown. He also mentioned the case of a child, α . 3 years, who was taken ill, with high temperature, vomiting, constipation, and pain in the region of the cæcum, which came on in the tropics, and was treated as appendicitis at Colombo. About ten days after arrival in Adelaide the child was in *extremis* with fecal vomiting. Under chloroform the abdomen was very firmly massaged, after no swelling could be felt in the region of McBurney's point, and on the child coming to from the anæsthetic there was no further vomiting, and a large quantity of hardened feces were passed. He strongly recommended massage of the abdomen in suitable cases, in cases of obstruction, and agreed with the teaching of Jonathan Hutchinson, that the results were sometimes most satisfactory. He also thought that several of the cases of so-called appendicitis, which occurred so commonly in the tropics, were really fecal accumulations, and supposed that they might originate from the contents of the alimentary canal becoming unduly dry from the constant free action of the skin.

Specimens shown by Prof. WATSON:—

1. Inguinal lipocoele and lymphangioma from a man α . 60 who wore a truss for many years. (Dr. Evans.)

2. Peripheral sarcoma of right femur of a girl α . 8. An exploratory incision revealed the nature of the growth and induced the parents a week later to consent to an ablation of the limb at the hip-joint by the bloodless method of Farabeuf. I do not know if there is any pathogenic connection between the present growth and a tumour of the right eye which was enucleated when the patient was 6 years old by a surgeon in Western Australia. Hectic in connection with sarcoma of femur has already been recorded by

MacCormick, of Sydney. The misleading high evening temperature which obtained in this case at once fell to normal and remained so after removal of the limb. (Dr. Lendon.)

3. Superior sympathetic ganglion evulsed from the base of the skull. From a lady *æt.* 62, who suffered from asthma and tri-facial neuralgia, unrelieved by peripheral operation and years of medical treatment. The improvement noted in this case tends to show that when the gasserian ganglion is deprived of its nervi nervorum, it loses its potency as a pain centre. Should, however, the symptoms return, the ganglion itself can be removed, but to avoid the hideous unilateral atrophy of the muscles of mastication noted in a former case, we will endeavour to spare the motor root, a feat I once saw actually performed on the living. (Dr. Fischer.)

4. Section of a temporal bone, made for the guidance of operators when performing Jansen's antrum operation. A single section surface shows the lateral sinus facial canal, antrum, tympanum, cochlea and semi-circular canals. (A. Watson.)

5. Cryptic appendix coated with sulphur-like exudate, removed from a man *æt.* 20, whose abdomen had been opened and his right rectus cut across eight months previously for suppurative appendicitis. When seen by Dr. Goode, who advised immediate operation, he had been ill only two days, no motions had passed, vomiting was incessant. The bowels were cut free from the extensive T scar, and the small intestines traced from the ileo-cæcal valve to the duodenum, old adhesions (both close and filamentous) between the various loops were cut adrift with a knife, and finally the bowel was floated free, but was too much distended to be returned into the abdominal cavity, and was therefore opened and disinflated, and then sewn up, washed and reduced, and the appendix removed. An adherent patch of purulent lymph was left on the iliac mesentery, but all fluid pus was sluiced out of the peritoneal cavity with hot saline solution. The abdomen was closed without a drain. The patient says that dressing his wound, now that the gauze stuffing of his first operation has been omitted, is not the ordeal it was. (Dr. J. A. G. Hamilton.)

6. Stomach of a prospector (Swede), *æt.* 50, who suffered from inoperable pyloric cancer. Gastro-jejunostomy by the triple-suture method of MacCormick, of Sydney, was employed. Vomiting after anæsthetic was prevented by substituting vinegar for ether towards the close of the operation. The patient read the telegrams from the Transvaal next morning, and soon developed an appetite for junket and Benger's food, but alas! on the fourth day, while sitting up he began to vomit, and burst open his abdominal wound, collapsed, and died eighteen hours after reposition of his entrails. Some cucumber and part of an orange were found in his stomach, a mass of vegetable fibre like chewed sugar-cane was astride of the jejunal spur and projected into the duodenal segment, and had caused the vomiting.

Dr. HAMILTON here explained that he was not an advocate of washing out the stomach, on account of the distress it caused, and that in a similar case (as he was not thoroughly conversant with Roux's gastro-enterostomy, "en Y") he would again perform the same operation, but would add a temporary complementary gastrostomy (Witzel's), with a soft catheter leading into the jejunum, so that the patient might be fed from the start. He would remove the catheter after the first week, and allow the insignificant sinus to close. In any case, he would not use a Murphy's button, as it

might become obstructed, and its application was no easier than the suture method which had produced the perfect line of union to be seen in the present specimen. He attributed the disaster to neglecting tying a surgical knot on one of the through-and-through silkworm gut sutures employed. (Dr. J. A. G. Hamilton.)

EXHIBITS.

Dr. POULTON exhibited—1. A prostatic calculus, the cause of profuse and prolonged hæmaturia removed by median lithotomy.

2. Large pulmonary hydatid, removed from superior lobe of left lung three months after removal of a cyst from inferior lobe of same lung.

3. Pulmonary hydatid of right lung, which prior to removal caused absolute dulness of the whole right back.

4. Examples of cystic ovaries and

5. Salpingitis (Dilated Tubes).

6. Sarcoma of testis and epididymis, from a subject who died within six months of their removal from rapid secondary thoracic and abdominal growths.

Minutes of last meeting were read and confirmed.

The Council reported—"That it is inexpedient to form a Defence Association in direct connection with the Branch, and it is questionable if the by-laws of the Association would sanction its formation."

The President (Dr. MARTEN) and Dr. SWIFT explained the situation, and asked members to give their support to an association that was about to be formed by the efforts of Dr. Swift and others.

Dr. POULTON read his paper. (See p. 535).

This was discussed by Drs. MARTEN, WATSON, HARROLD, HAYWARD, A. WIGG, and J. A. G. HAMILTON.

Dr. BRUMMITT (Vice-President) read a paper on "Fatal Case of Constipation." (To be inserted in a future issue).

The following spoke afterwards:—Drs. MARTEN, J. A. G. HAMILTON, A. A. HAMILTON, HONE, and POULTON.

Dr. HARROLD read his paper. (To be inserted in a future issue.)

Drs. MARTEN, MICHIE and others made some remarks, and Dr. HARROLD replied.

QUARANTINE AGAINST TUBERCULOSIS NOT TO BE ESTABLISHED.—The State Board of Health has decided not to quarantine California against the consumptives of other States. It has adopted a resolution, however, recommending that in all State institutions those inmates afflicted with tuberculosis be kept apart from the others.

OBSTINATE HICCUGH AFTER OPERATION.—Dr. Arthur Powell (*British Medical Journal*, September 30th) records the case of a Mussulman, aged 35 years, in whom lithotomy under chloroform was performed. A violent hiccough set in on the table and was continued for fifteen days. Every species of text-book treatment, including antispasmodics, narcotics, emetics, purgatives, counter irritation at epigastrium and over the phrenics, was tried without avail. No cause was to be found for the hiccough, which disappeared as suddenly as it had begun. A dose of chloral hydrate had been taken a few minutes previously, but recovery is not attributed thereto.

BALLARAT DISTRICT BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary quarterly meeting of the Branch was held on Thursday, October 26th. Present: The President, Drs. Cussen, Jordan, Laurie, McGowan, Mitchell, Palmer, Salmon, Affleck Scott and Usher.

Apologies were received from Drs. Davies, R. W. Lethbridge, Martin and Wilson.

Correspondence was received from the Editor of the *British Medical Journal*, and the Hon. Treasurer Melbourne Branch.

Accounts amounting to £18 8s. 6d. were passed for payment.

THE HON. SECRETARY reported the renewal for twelve months of deposit receipt for £71 15s.

Ballot for Frederick John Gawne, M.B., Melb., Jeparit, was taken, and he was declared elected a member of the Branch.

Dr. R. SCOTT (President) showed a young man in whom he had resected the shoulder-joint and more than two inches of the humerus, and who had now a most useful arm. He was unanimously congratulated upon the result.

Dr. SALMON read "Notes on a Case of Diphtheria Treated with Antitoxin," in which he had performed tracheotomy, and had been able to dispense with the tube in thirty-nine hours, while the child made a splendid recovery. He also showed a boy aged 5 years who had suffered from typhoid fever and had developed various paralyses, with every symptom of tubercular meningitis, which, however, eventually cleared up.

In the discussion which followed, Dr. PALMER quoted an almost similar case in his own practice. Dr. MITCHELL referred to the case of a physician in Adelaide which was diagnosed as tubercular meningitis, but ultimately proved to be typhoid fever.

Dr. PALMER read "Notes on a Case of Appendicitis," in which the appendix on removal contained two fish-bones (exhibit); also a case of ovarian hæmatocele; also dislocation and fracture of the astragalus, in which he excised the astragalus (exhibit), and the man has a most useful foot with only slightly limited movement. He also exhibited a piece of meat which he removed *post-mortem* from a woman. It was sticking in the œsophagus and pressed upon the glottis.

Dr. MCGOWAN showed a splendid collection of specimens, including a tubercular lung which was cæcated throughout; an aneurism of the aortic arch, which ruptured into the left pleura; cystic kidneys; two specimens of carcinoma of stomach; a perforating ulcer of the cæcum; hydatid of brain, and a carcinoma of the lower lip with a horny growth three-quarters of an inch in length.

THE PRESIDENT gave a short and interesting account of his trip to the Brisbane Medical Congress.

A vote of thanks to the chair closed the meeting.

PROCEEDINGS OF OTHER SOCIETIES.

MEDICAL SOCIETY OF QUEENSLAND.

THE 152nd general meeting was held on November 7th, 1899, in the Society's rooms. Present: Drs. Hardie (president), Gibson, Orr, Bell, Cameron, Byrne, Love, Hopkins, Francis, Carvoso, and Turner.

BRISBANE HOSPITAL RULES.

Dr. Byrne not being present to move a resolution standing in his name on the notice paper, Dr. GIBSON moved:—

"That it be a suggestion from the Medical Society to the Committee of the Brisbane General Hospital that bye-law No. 1 be altered by omitting the words 'Consult with and advise,' and that the rule be made to read, 'The hon. Medical Staff shall attend at the Hospital at stated times to direct the Resident Staff regarding the treatment of the cases allotted to them.'"

Dr. BYRNE, who arrived while the subject was under discussion, seconded Dr. Gibson's resolution. He said that it was extremely improbable that he should ever apply for a position on the Hospital staff, and therefore he felt disinterested in the matter. Several years ago the rule alluded to had given rise to much trouble, and so long as it continued in its present wording this trouble might be repeated. The rule had been interpreted to mean that the visiting staff held the position of consultants, and had not full control over the patients in their beds. Three members of the visiting staff—Drs. Thomson, Little and himself—had protested against this interpretation, and as a consequence Dr. Little and himself had been passed over at the annual election of the visiting staff by the Hospital Committee. He considered the present an opportune time to bring the matter forward.

Dr. LOVE entirely agreed with the motion, but doubted whether this was an opportune time to raise the question. He moved as an amendment—

"That Dr. Byrne be requested to bring the matter forward before the Amalgamated Medical Societies next year."

Dr. FRANCIS seconded the amendment.

Dr. TURNER was strongly in favour of the resolution as an abstract proposition, but did not think there was anything to be gained by sending it to the Hospital Committee. He thought that, to do any good, such a resolution should come from the Honorary Visiting Staff of the Hospital, or, failing them, from a meeting of the whole profession, such as would be furnished by the Amalgamated Societies.

Dr. HOPKINS strongly condemned the rules as ambiguous and self-contradictory, but did not think it the province of the Medical Society to interfere.

On being put to the vote the amendment was carried.

Dr. BELL read "Notes of a case of Foreign Body in the Right Bronchus." (See p. 546.)

Dr. FRANCIS related a case in which a boy, while playing at puff and dart, the dart being extemporised from a sewing needle and worsted, was seized with a fit of coughing. He was troubled after that with fits of violent coughing, but otherwise appeared in good health till the 18th day, when signs of pneumonia appeared at both bases. His breath was then offensive. The trachea was freely opened, and the needle found sticking into the mucous membrane covering the cricoid. He made a rapid recovery.

Dr. TURNER said the history was most important in forming a diagnosis, and in Dr. Bell's case the history of the primary accident was unusually indistinct. So long as the foreign body remained in a main bronchus there should not be any insuperable difficulty in its extraction. Should it not be spontaneously expelled by coughing after tracheotomy, a bent probe or wire might be used to shift it, when coughing would probably do the rest. If, however, it went into a smaller bronchus, which was more probable in the adult than in the child, the chances of extraction were very slender. There was a possibility of spontaneous expulsion, but, failing this, the case usually proved ultimately fatal. Dr. Bell's note about the character of the expectoration might prove valuable in a future case.

Dr. GIBSON thought that this was just the sort of case that should be reported. The trachea should be opened whenever there was a reasonable suspicion of a foreign body being in the air passages. He had had two cases of maize corn in the trachea, one of which was coughed out at the tracheotomy, the other on the day following. In future he would, in such a case, stitch the trachea to the edges of the skin wound.

Dr. LOVE related the case of a boy of six years who was troubled with continual violent coughing and choking, aggravated by attempts to speak. The laryngoscope gave a negative result, and there was no history of foreign body. No improvement occurred from treatment, and tracheotomy was contemplated when the boy coughed up several blue blanket hairs. It was then found out that he had been in the habit of picking his blanket and putting the hairs into his mouth. Rapid recovery followed the expectoration of the hairs.

Dr. CAMERON showed a piece of worsted thread, twenty inches long, which was coughed up by a tubercular adult ten days before death. He had been a cornet-player, and while playing was seized with violent pain in the windpipe, and from this date commenced the symptoms which culminated in laryngeal and pulmonary tuberculosis. He had also seen a child supposed to be suffering from pneumonia, who coughed up a piece of shell an inch long after eight days' illness. The lung slowly recovered.

Dr. LOVE showed for Dr. P. C. FENWICK, of New Zealand, a large series of models illustrating bladder, urethral, and kidney diseases. This highly interesting and unique exhibit was greatly admired, and a special vote of thanks to Dr. Fenwick was passed for allowing them to be exhibited.

The 12th annual and 153rd general meeting was held on December 5th, 1899, in the Society's rooms. Present: Dr. Hardie (President), Drs. Wheeler, Taylor, Cameron, Francis, Lightoller, Hopkins, Carvoso, Gibson, Bancroft, and Turner.

The HON. SEC. read the Report of Council, which, on the motion of the PRESIDENT, seconded by Dr. HOPKINS, was adopted.

The HON. TREASURER made a financial statement.

The PRESIDENT delivered his valedictory address, which was listened to with much interest. (To appear in January issue.) Dr. GIBSON moved, and Dr. TAYLOR seconded, a vote of thanks, which was carried by acclamation. The PRESIDENT replied.

REPORT OF COUNCIL FOR YEAR 1898.

In presenting this the twelfth Annual Report, we cannot but allude to the fact that, with this meeting, the Medical Society of Queensland will, under its present name, cease to exist. Whatever sentiment of regret we may feel at the loss of a name which has, we consider, established an honourable record during the past twelve years, is counterbalanced by the belief that this extinction is one of name only—that the life, energy, and prestige of the Society will still live under another name, and will, even more than in the past, form the centre of all that is best in the professional life, not only of this city, but of the whole colony of Queensland.

The Society's work during the past year has been characterised by a paucity of papers, due chiefly to the energy of its members being much occupied in the preparations for the holding of the Intercolonial Medical Congress. It will be remembered that the

invitation to the Congress to meet in Brisbane emanated in the first instance from this Society, and its members have felt themselves, therefore, to be under the responsibility of using every effort to make the Congress a success.

The papers have been in nearly every case followed by interesting discussions, and two meetings have been devoted almost entirely to the discussion, first, of lead-poisoning in children, and secondly, to the important question of the prevention of tuberculosis. As a direct outcome of the latter discussion, a public meeting was held at the invitation of the Society, presided over by His Excellency the Governor, for the formation of a Queensland Association for the Prevention of Tuberculosis—a body for whose existence the extensive prevalence of this largely-preventable disease is ample justification.

Our time, both at ordinary meetings and at a special meeting held for the purpose, has also been largely occupied in the negotiations for amalgamation with the Queensland Branch of the British Medical Association. On May 2nd a letter was read, from the Hon. Secretary of this Branch, conveying a resolution which affirmed the desirability of union; whereupon a resolution was immediately proposed and unanimously carried, that the Council of the Branch be invited to meet our Council to discuss a method of union. It was generally agreed that, while absorption into the local Branch of the Association was impracticable, any method by which a union could be effected on equal terms would be welcomed. After negotiations of some intricacy—in the course of which we desire to acknowledge the conciliatory spirit displayed by the President and the majority of the Council of the Branch—a scheme satisfactory to both Societies was agreed upon. According to this scheme, from January 1st, 1900, all members of this Society, being members of the British Medical Association, become members of the Queensland Branch, and take part in the election of officers for that year. At the same time, the names of all our members not attached to the British Medical Association have been sent home to the parent Association in Great Britain for election before the end of the present year.

During the course of the year the Society has been obliged to vacate its old quarters, owing to the demolition of the building, but have been fortunate in securing accommodation in the building we occupy at present of a highly satisfactory character.

Four new members have been elected during the year, while two members' names have had to be removed owing to their leaving the colony.

According to the usual custom, the meetings of the Council have been held at the residence of the President, whom we have to thank for his hospitality.

We append below a list of the papers and discussions:—

1. Presidential Address: On Certain Points in the Laws affecting Medical Practitioners in Queensland.—Dr. Wheeler.
2. Two Cases of Acute Deafness.—Dr. Gibson.
3. A Case of Puerperal Eclampsia with Hæmaturia.—Dr. Turner.
4. Discussion on Lead-Poisoning in Children.
5. Discussion on the Prevention of Tuberculosis.
6. A Case of Generalised Tuberculosis from Tuberculous Milk.—Dr. Love.
7. Notes on Adenoids.—Dr. Francis.
8. Notes of a Case of Foreign Body in the Right Bronchus.—Dr. Bell.

AUSTRALASIAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE Eighth Session, to be held in Melbourne, will commence on Tuesday, 9th January next, and will be continued throughout the following week. The Mayor of Melbourne, who has kindly consented to act as patron, will officially welcome the Association to the city. In addition to the meetings of the Sections, arrangements are in progress for various entertainments, and for excursions to places of interest. The Mayor of Melbourne has promised his assistance, and the Mayors of Ballarat City and Town will join in giving official reception to such members as may favour Ballarat with a visit. The School of Mines and other places will be visited before the party returns to Melbourne. At Bendigo a similar welcome will be extended to visitors, who will also have an opportunity of inspecting the Art Gallery, Mines, metallurgical plants, and water supply reservoirs of the locality. In Melbourne, those interested in Engineering will be enabled to see the various works and stations in and around the metropolis; and geologists will be afforded special facilities to visit the Werribee, Beaumaris, and Sandringham beds, and, farther afield, trips will be arranged to the Victorian Alps, the Hermitage, &c. Those who wish to become members of the Association are invited to send their names and subscriptions (£1) to the local secretary of the colony in which they reside. The ticket of membership entitles the holder to attend all meetings and entertainments, and to purchase tickets for the excursions. Each member will also receive gratis a copy of the Association's Report. Members who have paid their subscriptions are entitled to purchase ladies' tickets at 10s. each. These admit the holders to all the privileges of members, except the right to receive the Report. A reception room and office will be opened at the University for the convenience of members during the Session from 9 a.m. till 5 p.m. Members visiting Melbourne are requested to register their names and local addresses, as soon as possible after their arrival, in the book kept for the purpose. Information with respect to all matters connected with the Association and the arrangements for the meeting will be available, and members are requested to send in their names in advance for any excursion or excursion—they may decide to join, in order that arrangements may be made for their accommodation. Writing tables, stationery, and a box for receiving letters will be placed in the reception-room. The box will be cleared daily, and members can have their letters addressed to the office. An Official Journal, containing lists of the papers to be read in the Sections and other arrangements for the day, will be issued each morning.

The following are the Sectional Officers:—*Section A—Astronomy, Mathematics, and Physics.*—President-Elect—G. H. Knibbs, F.R.A.S., University of Sydney. Past-President—P. Baracchi, F.R.A.S., Government Astronomer, Victoria. Vice-Presidents—P. Baracchi, F.R.A.S.; Professor J. A. Pollock, B.Sc. Secretaries—R. J. A. Barnard, M.A.; E. G. Hogg, M.A. *Section B—Chemistry.*—President-Elect—F. B. Guthrie, F.C.S., Chief Chemist, Department of Agriculture, Sydney. Vice-Presidents—Professor Mica Smith, M.A.; W. M. Hamlet, F.I.A., F.C.S.; A. N. Pearson. Secretaries—A. W. Craig, M.A.; W. P. Wilkinson, F.C.S. *Section C—Geology and Mineralogy.*—President-Elect—Professor Ralph Tate, F.G.S., F.L.S., University of Adelaide. Past-President—Professor F. W. Hutton, F.R.S., F.G.S., Canterbury Museum, Christchurch,

New Zealand. Vice-Presidents—A. G. Maitland, F.G.S.; A. Montgomerie, M.A. Secretaries—T. S. Hall, M.A.; G. B. Pritchard, M.A. *Section D—Biology.*—President-Elect, J. J. Fletcher, M.A., B.Sc., Linnean Society of New South Wales, Sydney. Past-President—C. J. Martin, M.B., D.Sc., University of Melbourne. Vice-Presidents—Professor Benham, D.Sc.; A. H. S. Lucas, M.A., B.Sc.; C. J. Martin, M.B., D.Sc. Secretaries—W. Fielder; J. G. Leuhmann, F.L.S. *Section E—Geography.*—President-Elect—W. H. Tietkens, F.R.G.S., Maitland, N.S.W. Past President—Sir James Hector, K.C.M.G., F.R.S., M.D., Wellington, New Zealand. Vice-Presidents—C. Winnecke, F.R.G.S.; A. C. Macdonald, F.R.G.S.; A. W. Howitt, F.G.S. Secretaries—T. W. Fowler, M.C.E., F.R.G.S.; A. G. Wright. *Section F—Ethnology and Anthropology.*—President-Elect—F. J. Gillen, Moonta, South Australia. Past President—A. W. Howitt, F.G.S., Department of Audit, Victoria. Vice-Presidents—Rev. G. Brown, D.D.; W. E. Roth, B.A., M.R.C.S. Secretary—Rev. L. Fison, D.D. *Section G—Economic Science and Agriculture.*—President-Elect—Professor W. Lowrie, M.A., Roseworthy Agricultural College, South Australia. Past President—R. M. Johnston, F.L.S., F.A.S., Government Statist, Hobart, Tasmania. Chairman of Sub-section of Economics—Professor Jethro Brown, L.L.D., University, Hobart, Tasmania. Vice-Presidents—R. M. Johnston, F.L.S., F.S.S.; J. H. Maiden, F.L.S.; D. Martin. Secretaries—D. Macalpine; J. J. Fenton. *Section H—Engineering and Architecture.*—President-Elect—J. Sulman, F.R.I.B.A., Sydney. Past President—A. B. Moncrieff, M. Inst. C.E., M. A.M. Soc. C.E., Engineer-in-Chief, Railways and Public Works, South Australia. Vice-President—H. Deane, M.A. Secretaries—A. W. Arnott, C.E.; A. M. Henderson, M.C.E.; W. H. Nimmo, C.E. *Section I—Sanitary Science and Hygiene.*—President-Elect—Wilton W. R. Love, M.B., Brisbane. Past President—The Hon. Allan Campbell, M.L.C., L.R.C.P., Adelaide, South Australia. Vice-Presidents—D. Astley Gresswell, M.D.; J. Jamieson, M.D. Secretaries—B. A. Smith, M.C.E.; J. W. Springthorpe, M.A., M.D. *Section J—Mental Science and Education.*—President-Elect—W. L. Cleland, M.D., Adelaide, S.A. Past President—John Shirley, B.Sc., District Inspector of Schools, Brisbane, Queensland. Vice-Presidents—Rev. A. Gosman, D.D.; F. C. Eddy, M.A.; H. Jackson, M.A. Secretaries—Rev. E. H. Sugden, M.A., B.Sc.; J. T. Collins, M.A., L.L.B. Permanent Hon. Secretary—Professor A. Liversidge, L.L.D., F.R.S., University of Sydney.

EASTERN SUBURBS MEDICAL ASSOCIATION OF SYDNEY, N.S.W.

NINTH ANNUAL MEETING.

THE Ninth Annual General Meeting of the above Association was held at 121 Bathurst-street, Sydney, at 5 p.m. on October 19th, 1899. There was a fair attendance of members present. In the absence of the President (Dr. G. Lane Mullins), Dr. O'Gorman Hughes was elected chairman.

The HON. SECRETARY read the annual report, which was adopted.

The HON. TREASURER read the financial statement. This also was carried; it showed a credit balance of £11 7s.

The office-bearers for 1899-1900 were elected as follows:—President, Dr. F. H. Quaife; Vice-President, Dr. P. J. Collins; Hon. Treasurer, Dr. H. Walton Smith; Hon. Secretary, Dr. J. Adam Dick; Council,

lors (three), Drs. G. Lane Mullins, W. J. Barkas, and Murdoch Matheson. Auditors (two), Drs. L. E. F. Neill and M. O'Gorman Hughes.

The retiring officers were thanked for their services, and a similar compliment was paid to the Chairman, after which the meeting terminated.

At a meeting of the Council of the above Association, held on December 7th, a resolution was passed unanimously as follows:—"That the congratulations of this Association be conveyed to Colonel W. D. C. Williams, P.M.O., N.S.W. Force, upon the efficiency of his branch of the service, and upon the promptitude of the despatch of the section of the N.S.W. Army Medical Corps to the seat of war in South Africa."

SHORT EXTRACTS FROM FOREIGN MEDICAL LITERATURE.

BY WALTER SPENCER, M.D., ENMORE, N.S.W.

LES NOUVEAUX REMÈDES, Paris, besides presenting numerous original articles of great interest, marshalls all researches into new remedies together with hosts of clinical observations.

From a perusal of its pages up to September, 1899, we gather that the following may be considered to have established claims in therapeutics, *i.e.*, salophen, an advantageous substitute for *sod. salicyl*; tannigen, for infantile diarrhoea; lycofol, for gout; gelatin, as haemostatic; orthoform, as topical application to wounds; protargol solution, for gonorrhoea and blepharitis; narcein, for irritant cough.

Further studies are summarised as—

Phenalgin.—Analgesic in migraine associated with nausea, and in functional dysmenorrhoea.

For Herpes Zoster.—Local compress of

Acid picronitric ...	5
Acid citric ...	10
Aqua distillata ...	50

For Cystitis.—Urotropin.

For Epilepsy.—Strontii bromid. 0·90gr. b.d. in bitter infusion; dose to be increased up to 2gr. until relief is obtained; diet to be mainly of fish and vegetables, light meats being allowed twice or three times a week when the attacks diminish.

For Cracked and Sore Nipples.—Pulv. orthoform applied b.d. It is not only analgesic, antiseptic, but lacks marked savour and odour, promotes cicatrization, and is harmless both to mother and child. It should, however, be gently wiped before sucking. It is recommended for thrush and for nasal insufflation in *Amy fever*.

For Threatened Abortion.—Acetanilid 20 c.g. should be given repeatedly at short intervals.

When intense local ANÆSTHESIA is desired, *sircassin* (a non-toxic derivative of orthoform) may be given subcutaneously.

Dr. Renant advocates for rectal injection of CHILDREN, *cacodylate of sodium* instead of Fowler's solution, as being non-irritant and non-toxic. Being stable and deliquescent, it is also suitable for hypodermic injection of tubercular patients. He uses two solutions:—

- (1.) Weak: *Sod. cacodyl* ... 0·25
Aq. distill. ... 200·00
- (2.) Strong: *Sod. cacodyl* ... 0·40
Aq. distill. ... 200·00

Inject 5 c.c. b.d. for six days, 3 c.c. b.d. during ten days; rest for three to five days, then resume. It calms the irritability of neurasthenia, and of chronic chorea; it aids the action of bromine in certain cases of epilepsy.

As (CH_3)₂ O₂Na is the sodium salt of cacodylic acid *As* (CH_3)₂, or di-methylate of arsenic, derived by oxidation from an organic chemical combination. It contains 48·87 per cent. of arsenic.

With moderate doses, the drawbacks to arsenical treatment are usually obviated. It is of surprising efficacy in regeneration of tissue, multiplication of red corpuscles and of the lymphoid globules which produce the protamines of Kossel (believed to be the first stage in the formation of albuminoids). By this increase of lymphoid globules (especially of the polynuclear, which overcome infective bacteria and their products), as well as by multiplying red corpuscles, it necessarily renews the tissues and the blood by regulating oxidation.

GLYCEROPHOSPHATES, inasmuch as they result from the decomposition of lecithin, possess much interest. They have been tried for nervous *asthenia*, phosphaturia, Grave's disease and lumbago.

For mental depression, Dr. Robin prescribes—

Calc. glycerophosphat. ...	0·02 gr. to 0·04gr.
Pulv. Nuc Vom. ...	0·02 gr. to 0·03gr.
and Dr. Bahane—	
sod. glycerophosphat. ...	25gr.
Aq. distill. ...	
Aq. floris aurant ad. ...	50gr.
Syrup aurant ...	20gr.
	3 i. t.d.s.

According to Floret and Drezer, the antipyretic action of *heroin* is dissimilar to that of other antipyretics, acting on the oxidising changes in the lung, which it regulates and economises. It has been found useful in respiratory complications of influenza. In twenty-two cases complicated with bronchial catarrh, six with pleurodynia, two with drv pleurisy, one with pleuritic effusion, and one with broncho-pneumonia, Dr. Floret found that it reduced temperature and abridged the duration of disease. He gave heroin 0·005gr. + salophen 1gr. several times a day.

Its action on dyspnoea is compared with that of digitalis on the heart. Dr. Leo, of Bonn, finds that respiration is diminished in frequency, inspiration prolonged, and a larger volume of air inhaled. For cough the dose is 0·01gr. Many were enabled to repose recumbent under the influence of heroin who otherwise must have remained propped up for orthopnoea.

Holtkamp found it of great use also in the gastrointestinal variety of influenza.

Dr. Landau obtained complete cure in forty test cases of vaginal LEUCORRHOEA by injecting 10 to 20 c.c. of fresh brewer's yeast mixed to a syrupy consistency in beer, and by leaving a tampon for twenty-four hours. The process was repeated every second or third day, and in the worst cases lasted for six weeks.

Roesbach's studies of *thiocol* lead to the following conclusions: It has the advantage over other solutions of guaiacol of being soluble in water. It is physiologically assimilable up to 70 per cent. It is not toxic. For use in phthisis, Gessler, of Stuttgart, esteems it above creosotal. Its savour and odour are not disagreeable; 10gr. to 15gr. may be given daily for a long period without fear. Its action is prompt, fever declines, strength returns, respiration is relieved.

Berberin hydrochlorate is much extolled as a remedy in SPLENIC HYPERTROPHY. The organ undergoes contraction similarly to the uterus under ergot, hence caution must be used to avoid rupture. It contracts the splenic parenchyma, thus driving the germs of malaria into the general circulation. This causes a transient pyrexia, but exposes them more easily to destruction. To aid phagocytic action, quinine should be added.

For chronic constipation of females, Dr. Blondel recommends a morning enema:—

Aqueous extract of ipecac ... 10gr.
Aq. distillat ... 50gr.

3iss. used in 150gr. of water will usually produce an easy defecation the same evening, and daily for three or four days after if the bowel be solicited with regularity.

Braun considers *tannoform* to be specific in the diarrhoea of hysteria. Many have successfully used it for intestinal catarrh, painful diarrhoea, and for frequent liquid green motions in cases which had not been benefited by acids, opium, and bismuth. For sucklings up to $\frac{1}{2}$, for elder children up to $\frac{1}{4}$ a gramme may be prescribed. Fassano and others employ *tannoform* 1 + powdered talc 2 as a powder for ozena, also for balanitis blenorragia and endometritis.

Dermatologists have adopted it. Landau recommends

Tannoform ... 5.0
Ung. Resorcin ... 50.0

as dressing for facial eczema after crusts have been removed. Ehrmann has used it in 132 cases, and deems it specific for the same. Ullmann uses

Tannoform ... 3
White solid vaselin ... 10
Lanolin ... 20

and in chronic eczema associated with local hyperkeratosis has obtained splendid results from *tannoform* paste which contained ac. salicyl. 50 per cent.

Captol, product of the condensation of tannin and chloral, is used for seborrhoea. It soothes irritation, preserves the pellicules and tends to prevent loss of hair. Eichhoff recommends

Captol
Chloral hydrat.
Ac. tartaric, aa. ... 1.0
Ol. ricini ... 0.5
Sp. vini ... 100.0

LETTERS TO THE EDITOR.

(Continued on page 557.)

THE ANTI-TOXIN TREATMENT OF DIPHTHERIA.

(To the Editor of the Australasian Medical Gazette.)

SIR,—In the course of a discussion on the anti-toxin treatment of diphtheria at the Brisbane Congress, I made a statement to the effect that Dr. Ritchie, of Horsham (Vic.) had used Burroughs, Wellcome's *dried* serum in about 100 cases, and that in addition to being very cheap he also found it very effective.

Several medical men then asked for details of the method of using it, as their experiences with it had not been satisfactory.

I communicated with Dr. Ritchie, and then found that I had made a mistake. He was certainly using, and thought highly of, Burroughs, Wellcome and Co.'s serum, but it was their *liquid* serum he was using, and not the dried material, which latter he had found rather unmanageable.

Yours truly,

G. T. HOWARD.

Melbourne, December 12th, 1899.

DR. W. H. O'NEILL AND THE THIRLMERE HOME.

(To the Editor of the Australasian Medical Gazette.)

SIR,—In your issue of November 20th there is a report of a paper read by Dr. W. H. O'Neill at a meeting of the B.M. Association, Sydney, on "Tuberculosis, and its Treatment in Australia."

In that paper there is a paragraph relating to the Home for Consumptives at Thirlmere, which contains some very disparaging and unfounded statements so far as the present management is concerned, and if these statements are allowed to pass unchallenged, a very wrong impression may be conveyed to the medical profession.

With regard to the cuspidores, these are all of the one kind. They are properly lined with paper each day, and the contents are properly and carefully incinerated each day, and the empty tins are carefully disinfected.

The statement as to the patients wandering about the paddocks, expectorating here, there and everywhere, is a supposition, and, to say the least of it, a wild one.

There was a dairy situate not far from the Home, but since the present management this has been closed, to prevent any imaginary cause of the dissemination of tuberculosis.

We admit that the Home is not suitably planned, but "where needs must, &c." there is no choice. Yet, despite this, the Home has done, and is still doing, a good work, and hundreds of patients have been markedly benefited by their sojourn there, even during the winter months.

With regard to the admission of patients in all stages of the disease, that is one of the disabilities that we have to put up with. May I quote from our first report of the working of the Home?—"The large percentage of deaths is due to the fact that, since there is *only the one Home of its kind in N.S.W.*, there has been no discrimination in the selection of patients, applicants being admitted in all stages of the disease."

I might also quote from the report of Dr. F. Norton Manning, one of the members of the Royal Commission on Charities, who visited and inspected the Home a few months ago:—"The whole place is admirably kept; the dietary is good and abundant . . ."

I think it would have been much more graceful, instead of talking of incompetent committees, had a meed of praise been bestowed upon our philanthropic citizen, Colonel J. H. Goodlet, who initiated, maintained, and carried on this worthy institution for a period of 17 years; and when he found that he was no longer able to maintain this good work single-handed, a committee of ladies and gentlemen took up the work—a thankless and arduous task—and carried it on to the best of their ability, and without doubt benefited a large number of poor phthisical patients, for a further period of five years.

At present the executive committee of the Queen Victoria Homes for Consumptives Fund have a two years lease of this Home, dating from August 31st, 1898, and are managing it under many difficulties.

I presume that some degree of competency will be granted to the present management, since there are the following medical gentlemen on the executive committee:—Hon. Dr. MacLaurin, Dr. P. Sydney Jones, Dr. Camac Wilkinson, and the hon. secretary, all of whom are deeply interested in the work, and to whose watchful care and oversight I think the work carried on may be entrusted. I remain, Yours, &c.,

OECIL PURSER, Hon. Sec.,

Q.V. Homes for Consumptives Fund.

"Valdemar," Lewisham, December 9th, 1899.

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THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; J. B. GUNSON,
ADELAIDE, S.A.; AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH DECEMBER, 1899.

EDITORIALS.

A LOCK HOSPITAL FOR FEMALE PATIENTS IN SYDNEY.

REFERRING once more to the Fourth Report of the Royal Commission on Public Charities (see pages 467-516), lately issued by the Government Printer, and to certain recommendations with which the report concludes, we now deal with Recommendation No. 11, which reads as

follows:—"That a Lock Hospital for women, with not less than thirty beds, be established in Sydney and conducted under the Department of Government Asylums for the Infirm and Destitute."

With reference to the subject of the treatment of patients suffering from venereal diseases, much evidence was taken. It appears that it has been hitherto the practice to treat some of the males suffering from these diseases at the Little Bay Hospital, but the suggestion to send female patients there was opposed by all the medical witnesses who were examined, as it was thought not only was the distance from town too inconvenient, but great supervision would have to be exercised in dissociating the males from the females, were even the latter isolated in an enclosure. Much antagonism was exhibited to placing females in Lock wards of general hospitals, where the nature of the disease would be displayed at the head of each bed, causing the unfortunates to be looked down upon and despised by visitors to, and officials of the hospital, and some of the witnesses objected to the establishment of special Lock Hospitals, owing to the stigma that would be attached to any patients entering them. Thus, the whole question of the treatment of these cases is involved in considerable perplexity. Most important evidence was given by the Hon Dr. C. K. Mackellar, M.L.C., which may be summarised as follows:—He would not recommend a Contagious Diseases Act, but thought it expedient that the entrance to such institutions should be voluntary, and to afford every facility for such patients to be treated in an hospital as accessible as possible, and separate from any other institution; that it should be kept absolutely private; that there should be no police supervision; and no interference permitted by well-meaning persons who would insist upon making futile attempts to reclaim the patients.

When he occupied the position of President of the Board of Health and chief medical officer to the Government, he paid considerable attention to this subject, as the result of which some years ago, he addressed the following memorandum to the Principal Under-Secretary:—

"January, 1883. The fact that venereal disease exists to an alarming extent in all classes of the community no one can doubt, nor is there any question that the hospital accommodation at present available for its treatment entirely fails to exert any marked influence in lessening the number of those affected. This failure is due to a variety of causes, but I believe that it is chiefly owing to the exceedingly scanty accommodation afforded by the hospitals of this city for the treatment of such ailments.

I have the authority of Mr. Fosbery, the Inspector-General of Police, for saying that there are about three hundred (300) women in Sydney who live wholly by prostitution—that is to say, known to the police—and I think I may safely estimate the number of those who occasionally supplement their earnings by the same mode of life at fully double the number, so that we have a total of nine hundred (900) women very likely to acquire and disseminate the disease.

"One of the secretaries of the Association for Promoting the Extension of the Contagious Diseases Act of 1866 to the Civil Population of the United Kingdom says that the proportion of diseased to healthy prostitutes in London is one in three, whilst Mr. Simon, F.R.C.S., the late medical adviser to the Privy Council, in a recent paper upon prostitution, deemed the proportion of diseased women to be one in six. If we adopt the latter estimate we have one hundred and fifty (150) women constantly affected, while for their treatment at the present time there are in Sydney Hospital only ten beds available, and none at either the Prince Alfred or St. Vincent's Hospitals.

"The secretary of the Sydney Hospital informs me that the Lock ward is always full, and that females are frequently treated as out-patients, both for gonorrhoea and syphilis, whilst males with gonorrhoea are, as a rule, not admitted to the hospital, but treated as dispensary patients. It is clear, therefore, that a very much larger accommodation for the treatment of the disease is absolutely necessary; but, in my opinion, merely increasing the number of female lock beds in the general hospital would not meet the difficulty, as those institutions afford no special facilities for the treatment of these cases; and, further, a considerable amount of publicity, which is very much objected to by such persons, is unavoidable in their treatment in a general hospital. Under these circumstances it is not surprising that both syphilis and gonorrhoea are rapidly disseminated throughout the community.

"It is absurd to expect that a woman of the town will at once desist from prostitution on being infected with venereal disease. She is usually totally destitute of means wherewith to pay for her maintenance and treatment whilst ill, and, as a natural consequence, continues to practise her calling much to the detriment of her own health, and with destructive results to the general community.

"I have given much careful consideration to this subject, and am forced to the conclusion that State interference in some way is absolutely necessary, either by police supervision and medical inspection, which, however, is objected to by a large portion of the community on both moral, constitutional, and even medical grounds, or the establishment of Lock Hospitals, where diseased women could readily, without charge, and with a reasonable amount of privacy, obtain the most skilful treatment—not subject to the supervision of the police. I desire to give my emphatic opinion that the latter course is in every way the more desirable.

"I would recommend that a special institution, wholly under Government supervision, should be opened for the treatment of females suffering from venereal disease; that in it every facility should be offered for the ready and skilful treatment of such disorders, and, although I fully recognise the difficulty likely to be encountered in administering such an institution, I would nevertheless recommend that it should be on the voluntary principle, and that the inmates should be free from police supervision and subject only to the regulations under which all public hospitals are governed.

"I might have added there that not only should they be free from police supervision, but from the supervision of meddling busy bodies who are trying to reform them, who are just as harmful as the police in meddling with such cases, and who, I have no doubt, prevent these women availing themselves of the general hospitals, and would equally prevent them availing themselves of the treatment of this hospital.

"Institutions of the kind suggested have been created in some districts of the United Kingdom, notably in Glasgow, where their establishment has been attended with a large amount of good.

"As regards the treatment of the male portion of the community, I think the present arrangements in the general hospitals are quite adequate, and that all that is required is that a larger number of beds should be allotted to venereal disease. I do not think that any good result would follow their treatment in a special institution.

"Following on this minute the Colonial Secretary of the day caused a large sum of money, some £5,000 or £7,000, to be placed on the Estimates, and I was directed to choose a site, which I did at Miller's Point, a building which is now used as an eye hospital, and the Government resolved to take this building for the purpose I have indicated; but, some short time after that, some persons interested in the neighbourhood, together with some clergymen, waited upon the Colonial Secretary as a deputation, and they tried to show him that it was wrong to have such an institution, and that it should certainly not be in the city, that it ought to be clear away from the city, and so on, and meantime the vote lapsed.

Q. Then your objection to the treatment of the women at Little Bay is rather that they would have to go a long distance, than from any difficulty that would arise in separating them from the male patients? A. Well, there would be very great difficulty in separating them from the male patients there. I do not think it would be a desirable thing to put the women there under any circumstances, but I think that the distance would be a very great objection. An institution such as that should be in such a situation that those persons who are affected could readily obtain access without any trouble. It is so very much in the interest of the general public that they should be relieved of their ailments."

Members of the medical profession who have studied this question will entirely concur in the expression of matured opinion upon the subject by the Honorable Dr. Mackellar, and we trust that the project will be carried into effect at a very early date. We hope, however, that the term "Lock Hospital" will be abolished, and some other less opprobrious name substituted.

Let it be understood that this action arises from no maudling sentiment regarding the welfare of the women who have incurred these diseases, but from an earnest desire to promote the public weal by abating the spread of a class of disease which affects not only the victim who abandons himself to the gratification of his vices, but his wife and his offspring, and renders him capable of spreading broadcast around him maladies equal to, if not worse, in their effects than diphtheria, smallpox, and leprosy.

BACTERIOLOGY OF INFLUENZA AND THE BUBONIC PLAGUE.

In a letter to the Editor (page 558), the Hon. Dr. J. M. Creed, M.L.C., raises a very interesting question concerning a relationship which he supposes may possibly exist between the bacteria of influenza and those of the bubonic plague. Notwithstanding the extensive strides made in modern days in bacteriology, that science is yet in its infancy, and the metamorphoses which these germs may undergo in passing through the bodies or systems of various animals has yet to be thoroughly investigated. Analogy may suggest some such variation to occur in the existence of these minute organisms. It took much time and research to trace the relationship between the tapeworm and a hydatid cyst; yet, now that facts regarding this subject have been established, one wonders why numerous similar facts have not been proved regarding other forms of lower animal life. It is merely a repetition of the problem concerning the larva, the chrysalis and the butterfly.

"KEPLER" MALT EXTRACT.—This ideal flesh-forming food is found by medical men to be the most convenient means of administering those constituents essential for replacing tissue waste to phthisical patients or others in whom the normal powers of assimilation are imperfect, without making great demands on the physical powers of the patient. In the case of dyspeptic patients the preparation may be used instead of sugar to sweeten puddings or porridge, or may be taken with milk. It is a convenient vehicle for administration of iodide of iron or hypophosphites, and indeed for many medicines for regular use by children. "Kepler" Malt Extract contains the valuable constituents of malt in the highest state of activity.—BURROUGHS, WELLCOME & Co.

HEROIN.—Messrs. Bayer and Co. have lately introduced this new drug, which is the di-acetic ester of morphia. The dose is $\frac{1}{4}$ gr. three or four times a day, either in powder or mixture. It is said to possess advantages over codeine, and can be used safely to allay the cough of phthisis or bronchitis.

LETTERS TO THE EDITOR.

(Continued from page 554.)

CHRONIC BRIGHT'S DISEASE.

(To the Editor of the Australasian Medical Gazette.)

SIR,—I read with great interest Dr. Angel Money's papers on "Chronic Bright's Disease." The case of M. C., a girl aged 11 years, which I attended for six months in 1895-6, occurred to me in connection with this subject. She lived at Double Bay, Sydney. She had all the cardinal signs and symptoms of chronic parenchymatous nephritis, developing after an attack of scarlatina eighteen months previously. Iron was given, and nitro-glycerine, pilocarpine, and the mercury, digitalis and squill pill—and finally, magnes. sulphat. and baths, etc. The dropsy increased, however, until she seemed quite "waterlogged"—having anasarca of feet, hands, eyelids and conjunctivæ, with double pleural effusion and some ascites.

With all this she still passed 20 oz. urine per diem. At this juncture I brought my aspirator, but decided to give her another day, while trying the effect of fuchsine. Next day, to my surprise, the fluid in the chest was distinctly less. Dr. G. Armstrong and Dr. Murray Oram saw the case with me about this time. The fuchsine was continued, and gradually the fluid in chest and abdomen disappeared. After three weeks, dropsy of eyelids, feet and hands still persisted, and I then tried methylene blue, and continued it off and on with pilocarpine and nitro-glycerine for another three months, when there was a total disappearance of the albuminuria and dropsy. Her urine remained normal up to December, 1897, when I left Sydney. In a previous similar case I had aspirated repeatedly with a good result, and had I used the aspirator here, I should naturally have ascribed the good effect to the immediate lessening of tension. The new vaso-motor dilator, erythrol tetra-nitrate, had only just been brought into notice in London, and was not procurable in Sydney at that date.—I am, yours, etc.,

G. GORE GILLON, M.D., F.R.C.S.E.

Private Hospital, Patea, N.Z.,

November 11th, 1899.

RIVERINA AS A HEALTH RESORT FOR CONSUMPTIVES.

CORRECTION BY DR. LAWSON.

DR. LAWSON, of Berry-street, North Sydney, has written to us as follows:—

In the discussion on Dr. O'Neill's paper on "Tuberculosis," on page 507 of the *Gazette*, I am reported to have said:—

"Dr. Lawson agreed with Dr. O'Neill as to the question of drugs in cases of tuberculosis. He lived in the Riverina district at one time, and found it totally unsuitable for such cases. In the wet season it was muggy, and in the summer the dust storms were terrific."

The gist of what I *did* say is as follows:—

"I agreed with Dr. O'Neill as to the benefit to be derived from drugs, and also as regards the Riverina, which is not what it is praised up to be. I lived at Balranald at one time. In the hot season it was dusty, and in wet seasons it was muggy, but there were times of the year when it was good. With all

our new methods of treatment, we should not forget the high altitude treatment, which has done us such good service in the past.

"Phthisis generally commences in the apex. The difference in blood pressure or arterial tension between the base and apex of lung is about equal to the difference between atmospheric pressure at sea-level and at an altitude of 2,000 feet above sea-level. By transferring a patient from sea-level to 2,000 feet elevation, we are increasing the blood pressure on the capillaries of the lungs in proportion as we are decreasing the atmospheric pressure. At 2,000 feet elevation the decrease in atmospheric pressure causes the capillaries of the apex to support a blood pressure equal to that supported by the capillaries of the base at the sea-level. Thus the capillaries become stronger and better able to resist the inroads of the tubercle bacillus.

"This idea is supported by the statement of, I think, Fagge, who states that animals at the Zoo begin with phthisis at the posterior margins, and patients in bed begin with it at the anterior edges—in each case at the highest part."

What I really got up to speak about was the altitude; the other was merely a sort of introduction. If I gave, as I may have done, the impression that the Riverina was "totally unsuitable," I gave an impression which I never intended and never previously expressed during the twelve or thirteen years which I have known the Riverina. I have often told people:—"Before you go to the Riverina, you must enquire about the kind of season; if it be a wet season, it will be bad."

The Riverina is a big place—it is not all equally dusty; it is not always a wet season. Some parts are wetter than others, and during parts of the year the climate is *perfect*. One drawback is the lack of appropriate accommodation for invalids in the country.

BACTERIA OF INFLUENZA AND THE BUBONIC PLAGUE.

(To the Editor of the Australasian Medical Gazette.)

SIR,—I think enquiry and research would perhaps be of interest as to the question whether it is possible that the bacteria of influenza and those of bubonic plague may not have been derived from the same original source.

I hazard this very speculative suggestion because it has struck me as somewhat remarkable that both of these diseases have symptoms in common.

For instance, the first cases of plague in a fresh locality are frequently diagnosed as being "pneumonia." If I am not mistaken this occurred in that of the laboratory attendant in Vienna, and this notwithstanding that he was working amongst plague germs, and that he was seen by the expert in bubonic plague, Dr. Muller, who caught it from him and also fell a victim.

Both diseases appear to kill by the intense loss of nervous power and lowered vitality which they produce, the most marked difference between them being the affection and enlargement of the absorbent glands in some cases of the one disease, and not in the other.

It is, I believe, an accepted fact that the bacteria of plague only acquire their intense virulence by passage through rats, and that the dissemination of the disease in new but distant places, is principally dependent upon conveyance by them.

It has struck me that it would be of interest if careful laboratory researches were carried out to ascertain what would be the effect upon rats, if they were inocu-

lated with bacteria derived from well-marked cases of influenza.

I am fully conscious that my idea of the possibility of a common remote origin of these diseases is but surmise, yet I think research into the question would be of much interest, and possibly of utility, in pathology.—Yours faithfully,

JOHN M. CREED.

195 Elizabeth-street, Sydney,
11th December, 1899.

MEDICAL MATTERS IN WESTERN AUSTRALIA

(BY A SPECIAL CORRESPONDENT.)

THE medical profession in the Western division of the Australian Continent have been by no means inactive participants in the general struggle that has taken place in the colony since the first discovery of gold in the Kimberley district by the few men from the Great North-western district of New South Wales, who constituted the overflow from the remarkable prospecting and industrial movement started at Kimmaville, by the discovery of silver in specimens submitted to one of the itinerant summer lecturers in that township from the Newcastle College and School of Mines at the close of an ordinary lecture.

It has always been so. When gold was first discovered in Victoria, few of the practitioners established then in that colony could resist the temptation to visit the fields, either in their professional capacity, or as adventurous seekers after the precious metal.

It was fortunate for the population that this happened. The perils incident to mining over a wide area are of the most diverse character, and are attended by great suffering and mortality. Medical men who visit the fields need great resources in strength of character, bodily endurance, and professional equipment.

Though during the earlier years of a field surgical cases may preponderate, the patchy character of most fields leads generally to great concentration of population within narrow areas. This often giving rise to epidemics of typhoid fever, the function of the physician comes conspicuously in request, and more particularly in relation to preventive measures. These necessarily involve considerable sacrifices and disturbances in the domiciliary arrangements of the diggers; hence it is not always the doctor who is the most popular man on the field, especially if he be of a combative and conscientious temperament.

However, the lay populations soon discover that the questions involved must be faced. Hence in Western Australia there have grown up social and economic organisations of a character somewhat unprecedented on this continent, due, no doubt, to the vast extent and often desert-like nature of the fields, and the frequent utter destitution of the sick, a very large proportion of whom hail from the educated ranks of society.

Thus have we bush hospitals over wide areas of the country, consisting of both tents, with large gunyahs for the aborigines—both substantial, it is true, but very inadequately provided with mechanical means for the satisfactory treatment of injuries and disease.

The profession in Western Australia has certainly acquitted itself with credit in connection with the widespread responsibilities so suddenly cast upon it. Nor can it truthfully be said that the administration of Sir John Forrest has been either oblivious to its responsibilities, or very much lacking in resource in the connection. Rather the contrary. Sir John early saw

that the apparently generous promises of the then budding millionaires, and the liberal vaunts of operative miners, were of a very pie-crust order, though so loudly and effusively expressed, particularly at Kalgoorlie, and that the public safety imperatively required well equipped up-to-date hospitals in the most populous centres, such as Perth, Fremantle, Coolgardie, Kalgoorlie, and a few other places of promise.

The Government also had sad cause to find that medical officers are not always impeccable, and that to get the best out of them some official organisation and oversight is indispensable, not simply to prevent departures from the recognised social code, but to shield their office from insidious dangers incident to local purely lay management, the *personnel* of which in the more remote and inaccessible townships do not usually belong to the *crème de la crème* of society, particularly when viewed from the standpoint of commercial and social honour.

It must be admitted that, though structurally, the so styled "Government Hospitals" may leave something to be desired, the fact, however, of their medical officers being selected by a judiciously constituted State Medical Department, and of their being always in correspondence with a responsible official at the central seat of government has obviously many elements of convenience and advantage.

If the arrangement should not at all times yield satisfactory results an explanation will, probably, be found in some infirmity of the *personnel* at the headquarters staff. The system itself is well adapted to accomplish the ends desired by the Government.

At present the majority of the more remote hospitals of the colony are managed by local committees, and subscriptions are subsidised by Parliament on the £ per £ principle, the Government not taking any particular responsibility in the control of the institutions, whereas those hospitals in the larger country centres designated "Government Hospitals" are completely controlled by the Government through its "Medical Department," the chief medical resident officers being appointed by it, and held responsible by it for every detail of management.

It has been found, even in Perth, the contributions of the public fall even shorter of requirements than obtains in connection with the Sydney and Prince Alfred hospitals in Sydney. The disposition, therefore, is to make these institutions pure State hospitals, and to provide for their maintenance by Parliamentary grants.

This is considered by the profession and a large portion of the public regrettable, as the cultivation of the spirit of charity and untrammelled scientific enterprise and emulation on the part of the medical staff are objects of great importance, and more easily attainable in more or less voluntarily supported hospitals than obtains in State-governed institutions. It is likely, therefore, that these considerations being of high political and educative importance may lead to "the Department" restricting its activities somewhat in the direction of preventing scandals, waste, and abuses, and ensuring the appointment of officers of high character and the best available attainments.

In the course of time the managing committee will have themselves to blame if donations and bequests are few. It is obvious that in these *fin de siècle* days, when specialisation of medical functions has become more necessary than ever before, in consequence not simply of the complete bonlevement of old-time theories and practice, but from the limitations imposed by nature on individual talent and bodily endurance, it cannot be said that a heterogeneous body of subscribers

offers a favourable chance of the most scientifically qualified men being selected to fill positions in departments of hospital work devoted to gynaecology, diseases of the eye, ear, throat and nose, skin and other leading subdivisions in medicine and surgery.

At the same time the public does not desire to be bereft of all voice and interest in these great monuments of beneficence. The point they desiderate is some reliable ground on which they may base their selection; they admit their unavoidable inability to discriminate between the academic and scientific merits of various candidates. What subscribers really require is a recommendation from some responsible body capable of estimating, and in some rough but approximately effective way indicating, the relative or proportional claims of candidates for contested positions.

This could be accomplished by the committee of management submitting prior to election the names of all candidates for positions in the honorary technical departments of the hospitals in the order of their respective merits or claims, whether these claims be in connection with special acquirements, academic standing, or original work. The mere publication of names in the order of preponderancy in value of claims should involve no indignity or disadvantage to candidates, and committees could form a very fair estimate of those on comparing their own views with confidential recommendations expressly drawn up by a committee of members of the medical staff not themselves interested, such recommendations being always supported by mention of facts.

If at the same time financially eligible qualified voters of a definite standing as subscribers (say of six months or a year) only were admitted to privileges of the ballot-box, society and the profession would be spared the unpleasant scandals associated with hospital simony now so humiliate rampart in Melbourne, and the equally objectionable practice of committees ignoring the just claims of candidates who may as their medical colleagues on the board have had the courage of their opinions and carried reforms in spite of vested interests, commercial or otherwise, prejudice, misplaced friendship, or personal pique, as has unhappily marred the grand histories of the famous and rival hospitals in the enchanting capital of Eaststralia.

Given this official assistance to subscribers, it would soon be felt invidious and disadvantageous for boards of directors and committees of management of either great or small hospitals to usurp the popular function of electing medical officers.

Doubtless, in cases where these are associated with a medical school there is greater plausibility in favour of confining elections to hospital positions to the management, but the system of mere nominations by committees would be found in practice to answer equally well, as the utmost deference would certainly be paid to recommendations of a committee, while at the same time the interest and support of the public would be conserved. It is not surprising that colonial Governments in the present day, seeing that they so often almost alone have to pay the piper, and are not permitted to dance, should pretty generally be contemplating assumption of the entire management of hospitals in the same way as they conduct the hospitals for the insane. Not only is there much to be said in favour of this view, but the trend of opinion among the great preponderant body of Parliamentary voters. The men of labour, whether in the workshop, the field, or the mine, is steadily turning in this direction.

Fortunately, however, there is a powerful leaven in this numerically strong and influential class to whom

too much bureaucratic control is distasteful and suggestive of ultimate feudal developments their every organisation tends to, and is designed to counteract. It will be well if the medical profession and leading statesmen duly appreciate this feeling and turn it to the advantage it is so susceptible of.

But for the happy thought that led the Western Australian Government to appoint a "Medical Department" to advise on matters affecting the public health and to exercise control over hospitals, a fearful state of things would even now be prevailing nearly all over this colony.

In the circumstances, however, seeing how young it is, it will perhaps bear favourable comparison with many older countries, especially in regard to the more settled districts. It is in remote, or way-back parts, as they are colloquially called, that abuses prevail, where the solicitude of Government has been made instrumental in inflicting grievous wrong on individuals, and institutions intended for the succour of the sick, the wounded, and the helpless have been used by selfish and designing knaves to secure advantages, in themselves insignificant, but their money value being abstracted from an agency of so much potential good as lies in the sphere an honestly conducted hospital, involving much unmerited suffering and serious public loss. Until the *Australasian Medical Gazette* drew attention to the iniquitous scheme of the Bulong Hospital, the type of these frauds in benevolence, it appeared not improbable that the entire colony would have become more or less dependent for medical succour on Government money.

The "City of Bulong," an exceptionally well-ordered and pretty mining township, about 25 miles from Kalgoorlie, at one time the centre of a very large roving population of adventurers, thought to have a resident doctor—they had previously only had a visiting one from Kanowna. In order to secure him, they offered a fair salary, full opportunities for private practice, and quarters, but no board. On these terms they induced a gentleman who, though still young, was yet beyond the Bob Sawyer stage of medical life, to quit the Imperial service in Africa (Mombassa) and settle in the delightful climate of what West Australian miners affectionately call "the il."

After having got things into good working order, he was suddenly pulled up by the committee in a way little anticipated by him and which cannot possibly be assented to either by the Government or the medical profession, as the principle violated strikes at a practical detail of social life of fundamental importance.

The committee decided that any person subscribing one shilling a week should be entitled to admission to the hospital, and attendance and medicine as out-patients at either the hospital dispensary or at their own homes. No restriction in regard to pecuniary or social position was imposed, miners, wage-earners, and keepers of wine and beer shops, and hotel and all store keepers, bank and other managers, and Government officials, were equally eligible for membership.

The Government subsidy was sought to all these payments, in addition to payments for aborigines, police cases, etc.

The Government naturally opposed the arrangement, it being obvious that if the principle were extended to all the townships of the country requiring hospitals, in a very short period the annual parliamentary estimate on this score would exceed a million. Pressed, however, by that parliamentary scourge of a new country—the typical town-pump democrat well represented in

Bulong, the Government yielded, evidently against its own judgment.

It appears that the unscrupulous Bulong Committee were led to this shabby course on finding that the maintenance of a certain little cottage hospital had, during one month, cost £200, a large portion of which had been spent in food, etc., by the nursing staff, who had been in the habit of giving sumptuous evening entertainments and suppers to their admirers, not limited to bachelor committeemen, but including eligible guests from all local ranks in life.

It has been observed that entertainments of this character are chiefly objected to by in-patients, on the ground of the disturbance to repose and which sleep the playing of fiddles, trombones, and dancing so near the wards naturally cause.

The local nobility and gentry, however, who usually participate somewhat exclusively in these elegant festivities are found to appreciate them very highly, and the fair young gamps who have presided on these occasions have been esteemed as "ideal matrons," etc.,

Certainly, in these remote wilds, hospital work is not a particularly cheerful avocation, and the tendency among nurses when not relieved by a little active sympathy and kindness on the part of residents is towards what approaches perilously near declared melancholia.

It is, therefore, essential they should have reasonable facilities for seeing their friends and returning hospitalities; moreover, judicious liberality in this connection has a tendency to encourage the enlistment of a superior class of educated ladies into the profession—a detail of no small importance, as at present the "New Gamp" is very conspicuous in the ranks of the Western Australian nursing sisterhood; and as she too often shows herself not to be overburdened by scruples when the doctors' orders and prescriptions do not tally with her own ideas or convenience, and committeemen are often too susceptible to influences springing from admiration of a neat tournure, well moulded ankle, and a gay and interesting presentment, it becomes a matter of importance in connection with the frequently ghastly and unpleasant work of attending the sick and wounded, that the profession should, as a body, vigorously sustain its members in insisting on paramount supremacy in hospital work.

This, however, cannot be achieved if the Western Australian Government continues to shirk its responsibilities as it has hitherto done in connection with way-back hospitals, and merely uses its position to conciliate political comedians of the Vosper type.

There is no necessity for abolishing local committees, the Government, however, should always be represented on these by a contingent of local magistrates or other responsible persons; and the "Medical Department" should not only exercise a general control, but guide and periodically inspect.

It is unreasonable to expect that any laymen, however eminent his character and position, can effectively do such purely technical work. There is, however, no necessity for the Government to undertake the inside management and support of these hospitals. At present the entire business is carried out by a few local hotel keepers, interested trades people, the Colonial Secretary, and a few members of Parliament, hard run to hold their positions, and having none of the independence so necessary in persons occupying commanding political positions. The "Medical Department" could, without overburdening itself with detail, undertake to lay down rules for the guidance of remote local committees desiring to start a hospital, and also should impose necessary restrictions.

At present local committees go floundering on in the utmost confusion, each repeating the disastrous mistakes committed by their predecessors in similar work elsewhere—great waste of pecuniary resources, much local ill feeling, and, finally, a most imperfectly-constructed, dark, draughty, dismal, and badly-appointed microbe-breeding place being the outcome. In the towns, however, where they exist, the residents, including committee failures, usually hold to their institution with as much tenacity as old maids to their pets, and it means woe to a candidate at municipal elections if he has compromised the existence of the local hospital. This is really a pleasing trait in the community, but hospital advocates should remember that they only half fulfil their mission if they limit their labours to bullying the Government for support.

Hospital agencies are *par excellence* the most powerful incentives to the spirit of charity, the offspring of the noblest sentiments that animate the human breast—sympathy, pity, and otherwise inarticulate love. The medical profession is really in British countries the custodian and foster parent of this sublime virtue, and however prosperous the different states of Australia may become, it cannot but be that the necessity for hospitals will still exist.

For the persistent anonymous advocacy of the Australian Medical Faculty we probably owe the existence of two of the noblest and most useful monuments to the feeling of charity the world at this day possesses, the Walker and Flavell Convalescent Hospitals, and their bright success should spur the profession in the young West to an active emulation, and thereby relieve the load of a hard-run Government. When the great mining and financial experts—Dr. Modest Maryanski—the learned Russian Pole—Mr. Kauffmann, Mr. de Rose, and Mr. Zebina Lane, have clearly proved the certainty of the vast wealth lying under the Boulder Hill, one of these gentlemen loudly and publicly proclaimed his intention of showing the world how excellent a hospital might be built. So far his only contribution to this great and locally much-needed work has been a "handsome donation to Sister Veronica's private and well-conducted little hospital—an establishment, however, run on lines fatal to the just and necessary independence of the medical profession—a sort of private Bulong Hospital shop.

When one bears in mind the comparatively extremely humble position these gentlemen occupied prior to the opening up of the Boulder, and the vast fortunes that have suddenly accrued to them since through labours and enterprise by no means chiefly their own, it must be admitted the medical profession in the West, and in Perth, the capital, particularly, has scarcely been true to the instincts or traditions of our order in not having addressed themselves to some means whereby they could gently remind the Kalgoorlie millionaires of the unfulfilled promise of their leader and the terrible need for its performance.

At present those severely wounded on the Boulder mines are carried to Sister Veronica's—to whose lot it, moreover, often falls to have to bury them at the expense of the hospital, for, unlike New South Wales, the stupid Parliament of the country has made the law convenient for the exploitation by rich Perth speculators of lands which resident miners and traders only ought to lease.

Under the actual circumstances obtaining on all the goldfields of the West, it is almost impossible for the sturdy miner to find a resting-place for his weary corpus, as usually soon after a field is discovered, town sites are laid out and disposed of for cash to a

host of absentee semitic sharks in Perth, who black-mail the miner "for all he is worth," the practical result being that half of the town sites bear a deserted, dead cat appearance, the miners living in the bush—or what is left of it—between wretched break-wind fences, leaving their families in the East. Anything more infamous in its way it would be difficult to conceive, and one's disgust is not lessened when, living in the vicinity some time, the enquirer finds a large proportion of allotments are held in well-known political names, whose rack-renting practices are fatal to sanitary requirements and commercial enterprise.

Of course, where the wealthy section of a community ignore all the duties of charity, the functions of Government must fill the vacant place, and at Kalgoorlie it does, for there the Government keeps at its own expense, an ordinary workhouse hospital—tempered, it is true, by the excellent offices of an efficient medical staff. But Kalgoorlie being a few miles away from the Great Boulder mines, the place is not available for the graver cases, and but for Sister Veronica's little establishment some of these unfortunates would succumb on the road.

The situation is not creditable either to the mining magnates or the mine managers (who ought to courageously and faithfully represent matters in this regard) or to the companies' directors.

Indeed, the case affords an apt illustration of one of the worst of the many evils sustained by civilization through the prevalence of the anonymous, absolutely soulless and irresponsible company system, of social industry. In very truth, it is horrible in its effects when viewed in the light of the practising physician.

And, unhappily, there does not appear to exist either the ability or will, in the Perth Parliamentary clique, to correct matters.

Probably, Parliamentary Government has never shown to greater disadvantage than in Australia in recent years, in connection with the dangerous and physically disabling occupation of mining and quarrying. This weakness of the Parliamentary system is very conspicuous in the west.

In a despotic system of Government like that obtaining in what by us is thought to be half barbarous Russia, a new industrial outbreak, such as the silver boom and its vast continuation—or offspring—the Western Australian gold rush would first have received careful theoretical study; on this would have been founded a system of municipal, police, medical and scientific or technical control, in which, doubtless, there would in the first stages, in relation to the securing of titles to mining properties, have been bribery, but the title once secured to a property, Russian official honour, is safely depended on to make it good against all comers, whether in the law shark trade or any other.

The wounded and sick would all along the entire line be amply provided for, and their up-to-date scientific treatment secured, not exclusively at the cost of the State, but through enforced co-operation of the State, local authorities, mine owners, and operatives—the latter, perhaps, paying the smallest, if any, proportion.

A scheme well laid out on these lines would meet the case in the West, and Sir John Forrest has attempted it, but hitherto his efforts have been thwarted by the political myopia of the Vosperian type under local pressure from Bulong, Bardoc and other decaying fields.

Fortunately, the Pharmaceutical Society at Perth, the A.N.A., and the friendly societies generally, have realised the situation and helped the Government to

arrest the free hospital and dispensary shop movement, and hence several of these impostures have been suppressed, notably those at Bardoc, Goongarrie, and elsewhere where contiguity to a railway and proximity to an already well-appointed hospital obtains. Bulong, however, though only about twenty miles from the Kalgoorlie and Kanowna hospitals, backed by its opulent mine managers and greedy political "bungas," still successfully defies all ideas of honesty. Its dispensary is one of the best supplied in the colony, and all comers, rich or poor, practically help themselves to its elegant contents, the only qualifying condition being the payment of one shilling per week, the Government contributing an equivalent sum.

The in-patient department of this establishment, however, is so inadequate that when grave cases occur, particularly among the miners, they go to the Kalgoorlie Hospital, which is appointed on approximately scientific lines and effectively officered.

There may be need at Bulong, Goongarrie, Leonora, and other places for a house of reception for the temporary accommodation of grave cases until they rally and can bear removal to an efficient district hospital, but to continue them on present lines means the sacrifice of lives, limbs, and eyes that might otherwise be saved.

Personal ability on the part of a medical hospital staff is admittedly a chief factor in successful works but now that both surgery and medicine have so nearly attained to the position of exact sciences, the condition, this important truth implies must be respected. The best-informed and most skilful surgeon can but expect disappointing results if he be not adequately supplied with aseptic instruments, a well-lighted aseptic operating room, and the many mechanical and precise scientific resources which the amazing advances in the domains of pathology and applied mechanics and surgery have in quite recent years rendered available. Hence the Perth Branch of the British Medical Association have at this early stage in the development of the West, acted wisely and patriotically in appointing a Parliamentary Committee to study the various questions of medical economics, hospital organisation, national and local sanitary obligations, the limitations of function proper to friendly societies, and the duties of the state and various sections of society towards the sick, wounded and infirm, the last-mentioned group including those mentally as well as physically afflicted, whether their unhappy condition be congenital or acquired.

The leaders of the profession in the West correctly think that now, during the early adolescence of the potentially principal colony of the Australian group, is the opportune time to place medical matters, including hospital, sanitary and educational details, on a right basis. This committee recently interviewed the Colonial Secretary, whose department has whatever control legally obtains over hospital and cognate matters, and represented how unnecessary and injurious it was to pander to the designs of the Bulong and Bardoc hospital school. That gentleman assured the deputation he appreciated the justice of their representations, admitted that the Bulong shop was the least justifiable of the lot, and that he had already given *de coup de grace* to several similar frauds.

He wisely, however, intimated that in so purely technical a matter he must be guided by the report of his "Medical Department." It is satisfactory to learn that, since this interview, an attempt made by the associated managers at Leonora—a most prosperous goldfield—to practically confiscate the local doctor's earnings with the help of a Government sham

hospital subsidy, has failed, the Government having firmly decided to be no party to so nefarious a proceeding. The Minister had, moreover, one excellent ground for his determination, viz., that within that zone of country a well-appointed Government hospital already existed—that at Mount Malcolm—distant but twelve miles from Leonora.

The position, therefore, being now clear, it is devoutly to be hoped we may hear no more of these abuses.

One well-appointed hospital to a fairly settled zone of country 50 miles across, with local houses for temporary reception for severe cases, will surely be sufficient for many years. Drs. Tratman, Horrocks and Werner continue their functions as members of the Parliamentary committee of the Perth branch of the British Medical Association, whose members just now are very keen on the subject of medical economics, the so-called friendly societies having reduced their medical payments to a standard greatly below that obtaining among similar bodies in Eastern Australia.

It is beginning to be realised by the medical profession that all the beneficent advances in recent medical science are rendered practically nugatory to the great bulk of the population by present arrangements, and that the claims of the self-respecting sick can only be met by the assumption by associated local practitioners themselves of the duties of organisation and maintenance of medical funds for the wage earning branch of any community.

There exist some excellent working models of the principle in Australia, notably one at Broken Hill.

The subject, however, is one of great economic importance, and the Perth Parliamentary Committee may render inestimable service to the entire community if it address itself with courage and vigour to the work it has laid out for itself.

The magnitude of only one phase of the question may be inferred from the well ascertained and still provable fact that the sick provision made by the workers during a great railway boom in one of the colonies in recent years, was so handled under the then (and still) ruling "Truck" system, that no less than \$75,000 was misappropriated, while many a victim still exists, helpless or paralysed, who is perhaps legally, but certainly morally, entitled to its benefits. The workers and the medical profession ought to run hand in hand in this business, and would do so with much mutual advantage, if the subject were approached judiciously, and from the side of the doctors with firmness.

PUBLIC HEALTH.

For some months past the New South Wales Tuberculosis Commission has been holding inquiries as to the best way of combating tuberculosis and other diseases in our herds. Several progress reports have been presented from time to time, but the Commission expired on November 30th. An application was received for an extension of time, to enable further inquiries to be made, but the Government decided that the application should not be entertained. The Premier said the inquiry was one which, in his opinion, came within the province of the Board of Health.

The s.s. "Nineveh" has arrived at Australian ports from South Africa with a case of smallpox on board. Three cases have occurred in all, with one death.

The Hobart Health Officer (Dr. G. Sprott) reports that during the month of October there were 56 deaths

registered in the registration district of Hobart. There were 35 deaths in the city, giving a death-rate equal to 13.80 per 1,000 per annum. The principal causes of death were:—Whooping cough, 2; diphtheria, 1; cancer, 2; tabes mesenterica, 1; phthisis, 2; premature birth, 2; old age, 4; heart disease, 5; bronchitis, 1.

During the month of October there were twenty-three deaths from influenza in Sydney, three from whooping cough, and one from typhoid fever. In Ballarat there were thirty-seven from influenza. In Brisbane one from whooping cough. In Wellington four from whooping cough. In Dunedin three from whooping cough. During September there were in Adelaide three deaths from diphtheria and two from influenza.

The *Ohio Sanitary Bulletin* (U.S.A.) refers to the remarkable fall in the death rate from phthisis in New South Wales since the introduction of the Dairies Supervision Act of 1886.

The analysts of the Massachusetts (U.S.A.) State Board of Health have recently analysed a number of proprietary medicines with a view to finding out whether they contained poisonous drugs. The following are some of the results as published by the Board:—*Cosmetics*.—The following contain acetate of lead, or some active lead compound: Ayer's Hair Vigor (contained the equivalent of about 0.30 per cent. of lead), Mrs. Allen's Hair Restorer (2.30), Wood's Hair Restorative (1.59), Parker's Hair Balsam (2.32). The following contained corrosive sublimate or other poisonous salt of mercury, in the proportion of one to fifteen grains per ounce: Madame Ruppert's World-Renowned Face Bleach, Harriet Hubbard Ayer's Recamier Cream, Balm, and Lotion. We hope to publish a further instalment next month.

HOSPITAL INTELLIGENCE.

TASMANIA.

NEW NORFOLK LUNATIC ASYLUM.—The disclosures made by the Chief Secretary of Tasmania in the Legislative Council on December 1st reveal a condition of affairs simply disgraceful. The whole matter appears to have arisen from the fact that the officials could not get sufficient stores, and there is reason to believe that their applications for them were refused.

LAUNCESTON HOSPITAL.—It has been decided by the Board to build an apartment for the bacteriological plant above the present mortuary, at a cost of £450, and that the Government be again asked to find the money.

THE MORGUE, LAUNCESTON.—At an inquest held recently attention was drawn to the condition of the Morgue. It is reported that Dr. Wilson stated that he had to conduct a *post mortem* examination during the afternoon, and had found the Morgue quite unfitted with any conveniences. The water that was required had to be obtained from an hotel across the street. When the jury went to the Morgue to view the body no provision was found for lighting the apartment, and the corpse had to be seen by match-light. The coroner, jury and witnesses all agreed, it is reported, that the condition of the place was a disgrace.

LITERARY NOTE.

THE TRUE AGE OF MAN.

A proverb there is with the popular seal
(You hear it in various places),
That a man is as old as he happens to feel,
A woman as old as her face is.
But Science, advancing with seven league boots,
Arousing the vulgar from coma,
The truth of the proverb most boldly disputes
If one's arteries show atheroma.

For we need to be told
(So pathologists hold)
That a man is as old
As his arteries.

Robert Burns, of the West, who first followed the plough,

And later the trade of a poet,
In a popular song has been known to avow
(Now most of the multitude know it)
That although in the case of a blue-blooded duke
The coat may be spicker and spanner,
For all that the coin in his pocket's a fluke
And a man's still a man, in a manner

But Rob ne'er was told
What pathologists hold,
That a man is as old
As his arteries.

So Shakespeare (or Bacon?) is totally wrong
In talking of Man's Seven Ages,
And Burns is at sea in his topical song
On the fellow who sweats for his wages.
For when a poor beggar is nearing his end,
And with Death and the Devil he wrestles,
His looks or his feelings no succour can lend,
But only the state of his vessels.

So now you are told
What pathologists hold,
That a man is as old
As his arteries.

EASTON WESTON.

Edinburgh *Evening Dispatch*.

MILITARY INTELLIGENCE.

QUEENSLAND.—The resignation of F. H. V. Voss, F.R.C.S. Eng., as Captain in the Army Medical Corps of the Queensland Defence Force (Land), has been accepted by His Excellency the Lieutenant-Governor.

VICTORIA.—The following appointment is announced:—Wyatt Bristow Docher, M.D., to be Lieutenant on probation in the Medical Staff, Militia-Fixed Establishment, *vice* Major H. L. Miller, M.D., whose resignation has been accepted.

NEW ZEALAND.—His Excellency the Governor has approved of the services of Surgeon-Major J. Irving. Volunteer Medical Staff (attached to the Canterbury Mounted Rifles) being retained until he reaches the age of 65 years.

THE WAR IN SOUTH AFRICA.—Drs. A. MacCormick and R. Scot-Skirving, of Sydney, have volunteered for professional service in South Africa.

THE WAR IN SOUTH AFRICA.

AUSTRALASIAN MEDICAL OFFICERS.

WE believe the following is a complete list of the medical officers who have gone to South Africa with Australasian contingents:—

NEW SOUTH WALES.

COLONEL WILLIAM DANIEL CAMPBELL WILLIAMS, L.R.C.P. Lond. 1879, M.R.C.S. Eng. 1878, Senior-Surgeon St. Vincent's Hospital, Sydney; P.M.O. N.S.W. Forces, Surgeon-Major 1885, Brigade-Surgeon-Lieutenant-Colonel 1889, Colonel 1896. Accompanied Soudan Expedition 1885, Suakim; advance on Tamai; mentioned in special despatch by Sir Gerald Graham, V.C.; medal and clasp; Khedive Star.

MAJOR THOMAS HENRY FIASCHI, M.D., Ch.D. Pisa 1877, Italian certificate to practice medicine and surgery 1878, Surgeon to Sydney Hospital; Surgeon-Captain 1891, temporary Major 1899, Senior Medical Officer of N.S.W. Mounted Troops, and Officer Commanding Mounted Bearer Section N.S.W. Army Medical Corps.

CAPTAIN REUTER EMEBICH ROTH, M.R.C.S. Eng. 1881, Captain A.M.C. 1894, is Commanding Officer of "A" Company, Army Medical Corps.

CAPTAIN TERENCE ALBERT GREEN, M.B., Ch.M. Sydney 1893; Surgeon-Lieutenant 1895, Captain 1897, O.C. "B" Company N.S.W. Army Medical Corps.

CAPTAIN ALFRED EDWARD PERKINS, M.A., M.B., Ch.M. Sydney 1888; Surgeon-Lieutenant 1895, Captain 1898. Attached to 3rd Infantry Regiment.

LIEUTENANT THOMAS MORGAN MARTIN, B.A., T.C.D., L.R.C.P. Edin. et L.R.C.S. Edin. 1879: Lieutenant 1897; attached to "B" Company N.S.W. Army Medical Corps.

LIEUTENANT CHARLES AUGUSTUS EDWARDS, L.R.C.P. Ed., et L.R.C.S. Ed. 1826, L.S.A. Lond. 1883. Lieutenant 1897. Attached to 2nd Infantry Regiment.

LIEUTENANT EDWARD PATRICK McDONNELL, L.R.C.S.I. 1877, L.K.Q.C.P.I. 1878, L.A.H. Dub. Lieutenant 1899. Attached to Mounted Rifles, Forbes. Is in medical charge of Troops on board transport s.s. "Langton Grange."

VICTORIA.

CAPTAIN WILLIAM FLEMING HOPKINS, B.A. Adel. M.B. Melb. 1891, Ch.B. 1894. Captain on Victorian Rangers' Medical Staff.

SOUTH AUSTRALIA.

CAPTAIN JOHN TRESSILIAN TOLL, L.R.C.P. Ed. 1876, L.R.C.S. Ed. 1877. Joined S.A. Volunteers in 1880, became Surgeon-Major S.A. Militia 1891. Is attached to Garrison Artillery at Port Adelaide.

QUEENSLAND.

CAPTAIN J. ESPIE DODS, M.B., C.M., D.P.H., is in medical charge of the Queensland Troops on board the transport "Cornwall."

WESTERN AUSTRALIA.

MAJOR GEORGE FREDERICK MCWILLIAMS, M.B., Ch.B. Melb. 1889. Major 1899. In medical charge of Perth District.

NEW ZEALAND.

SURGEON THOMAS BURNS, L.R.C.P. & S. Edin., L.F.P.S. Glas. 1888.

OBITUARY.

THOMAS MOORE PHILSON, M.D., L.R.C.S. Edin. 1893, died recently. Dr. Philson was formerly a surgeon in the British army, Provincial Surgeon in New Zealand, Coroner and Health Officer for the Port of Auckland.

CHANGE OF ADDRESS, ETC.

CONNELLY, A. W., M.B., &c., has left Bendigo (Vic.) and gone to Kalgoolie (W.A.).

COPE, Dr. H. R., late of St. Vincent's Hospital, Sydney, has commenced practice at Summer Hill, near Sydney.

DOCKER, Dr. W. B., late of the Women's Hospital, Melbourne, has succeeded to the practice of Dr. Dowling, at Portland (Vic.).

EDWARDS, Dr. C. A., of Waverley, near Sydney, has left his practice and has gone to South Africa with the N.S.W. Army Medical Corps as a Lieutenant.

FIASCHI, Dr. T. H., of Macquarie-street, Sydney, has left his practice and has gone to South Africa with the N.S.W. Army Medical Corps as a Major.

GREEN, Dr. T. A., of College-street, Sydney, has left his practice and has gone to South Africa with the N.S.W. Army Medical Corps as a Captain.

LAUDER, Dr. C. D., has removed from Mosman, N.S.W., to Port Adelaide, S.A.

LOW, Dr. C., has removed from Invercargill to Opunake, Province of Taranaki, N.Z.

McDONNELL, Dr. E. P., of Forbes, N.S.W., has left his practice and has gone to South Africa with the N.S.W. Army Medical Corps as a Lieutenant.

MARTIN, Dr. T. M., of College-street, Sydney, has left his practice and has gone to South Africa with the N.S.W. Army Medical Corps as a Lieutenant.

PAGET, Dr. O. F., has returned from England, and has resumed practice at Fremantle, W.A.

PERKINS, Dr. A. E., of Marrickville, near Sydney, has left his practice and has gone to South Africa with the N.S.W. Army Medical Corps as a Captain.

RENZI, Dr. H. C. C. DE, has commenced practice at Wellington, N.Z.

ROTH, Dr. R. E., of Darlinghurst, Sydney, has left his practice and has gone to South Africa with the N.S.W. Army Medical Corps as a Captain.

SCOTT, Dr. E. N., has removed from Clermont, Q., to Melbourne.

THOMAS, Dr. D., of Manly, Sydney, has taken Dr. G. R. P. Hall into partnership.

WELD, Dr. J. C., late of Hopetoun, has succeeded to the practice of the late Dr. Durgan, at Carisbrook, Vic.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced:

Aubin, Dr. E. D., to be Resident Surgeon, the Thames Hospital, N.Z.

Davies, A. J., L.R.C.P. Edin., to be Medical Officer at Beaumont, Q.

Docker, W. B., M.B., &c., to be Officer of Health for Shire of Portland, Vic. *vice* Dr. N. Dowling, resigned.

Gamble, M. F. A., L.R.C.P., &c., to be Acting Medical Superintendent Lunatic Asylum, Sunbury, Vic.

Gething, W. J., L.R.C.P. & S. Edin., to be Acting Medical Officer at Port Adelaide during the temporary absence of Dr. J. T. Tell in South Africa.

Gorrick, H. F. C., M.D. Bellevue Med. Coll., New York, to be Government Medical Officer and Vaccinator at Oatfield, N.S.W.

Gregg, J., M.B., &c., to be Officer of Health for Shire of Mansfield, Vic. *vice* Dr. F. H. Liddle, resigned.

Healy, J. J. B., L.R.C.P., &c., to be Officer of Health for Shire of Phillip Island and Woolamai, Vic.

Kearney, G. A., L.R.C.P. & S. Irel., &c., to be Health Officer at Leonnville, W.A.
 Low, C., M.B., C.M. Edin., &c., to be a Public Vaccinator for the District of Oponake.
 Macgowan, E. T., M.B., B.S. Melb., to be House Surgeon, General Hospital, Hobart, *vice* Dr. Spark, resigned.
 MacMillan, J. G., M.B., &c., to be Acting Officer of Health for Shire of Ararat, Central and South Ridings, Vic., *vice* Dr. W. J. Cross, resigned.
 Mullen, W. L., M.D. &c., to be Acting Medical Superintendent of Metropolitan Lunatic Asylum, Vic.
 O'Brien, D. P., F.R.C.S.I., to be Medical Officer at Ravenswood, Q.
 Palmer, A. E. A., M.B., Ch.B. Univ. N.Z., to be a Public Vaccinator for District of Featherston, N.Z.
 Putnam, Ph., M.B., &c., to be Assistant Resident Medical Officer of the Hospital, Bendigo (Vic.), *vice* Dr. A. W. Connelly, resigned.
 Read, Dr. G. F., to be Acting Superintendent of Hospital for Inebriates, New Norfolk, Tas.
 Rhodes, A., M.B., &c., to be Officer of Health for Shire of Portland, East Riding, Vic., *vice* Dr. J. G. MacMillan, resigned.
 Scott, J. M., M.B., &c., to be Acting Medical Superintendent of the Lunatic Asylum, Beechworth, Vic.
 Steele, J., M.B., &c., to be Acting Medical Superintendent, Lunatic Asylum, Ballarat, Vic., *vice* Dr. R. W. Lethbridge, absent on leave.
 Weld, J. C., L.K.Q.C.P.I., to be Officer of Health for Borough of Carisbrook, Vic., *vice* Dr. C. B. Dugan, deceased.
 Wray, C. J. H., L.R.C.P. Edin., &c., to be Visiting Surgeon to Reformatory School for Boys, Diamantina, Q.

REVIEW.

THE TREATMENT OF PELVIC INFLAMMATIONS THROUGH THE VAGINA. By William B. Pryor, M.D., Professor of Gynecology, New York Polyclinic; Consulting Surgeon, City (Charity) Hospital, etc., etc., with 110 Illustrations. Octavo, 248 pages. Price, 8s. 6d. net. Philadelphia: W. B. Saunders. Melbourne: Jas. Little, 1899.

This book has been written at the request of gentlemen who have attended the author's lectures at the New York Polyclinic. It should prove of great value to all general practitioners, as well as to those specially practising gynecology, as it gives minute details for the treatment of the inflammatory lesions of the female pelvis, which are frequently not found in large text-books on the same subject. Curettage, for instance, is clearly described and cogent reasons given for not applying carbolic acid, iodine or other powerful caustics to the interior of the uterus. Vaginal ablation of the uterus and appendages is very fully described, and illustrated from photographs taken during the operation. The author invariably adopts the operation of "hemisection," splitting the uterus into two halves and securing the ovarian and uterine vessels with forceps. It is claimed for the operation that it is performed in less than half the time of an abdominal hysterectomy, that the convalescence is much less disagreeable, that the results are better, and the mortality less. The instruments used are all figured. Altogether we have much pleasure in commending this work to the notice of our readers.

PHARMACY NOTES.

FLUORESOLIN.—Messrs. Burroughs, Wellcome & Co. are preparing this chemical in "Ophthalmic Tabloid" form, each disc (or tabloid) containing $\frac{1}{100}$ of a grain. It is soluble in the lachrymal secretion, and is employed for the diagnosis of corneal lesions. The normal cornea is not stained, but ulcers or parts denuded of epithelium become green and remain so for a few hours.

GUAIACOL CAMPHORATE IN THE TREATMENT OF CONSUMPTION.—This new drug, a result of original work in the Wellcome Chemical Research Laboratories,

and now prepared by Burroughs, Wellcome & Co., is a combination of Guaiacol with Camphoric Acid. It is well known that these bodies have been used separately for some time in the treatment of consumption with most favourable results. Guaiacol has been found to exercise a general action in controlling the disease, and camphoric acid diminishes the characteristic night sweats. Inferentially, therefore, it was considered likely that a combination of these two therapeutic agents would be extremely valuable. Clinical trials by a responsible authority appear to justify this view. He reports, as a result of his observation of a series of test cases, that he is well satisfied with the results obtained, especially as this combination appears to be much better borne than other preparations of Guaiacol. It is supplied in powder or tabloid form, each gr. v.

We have also received samples of Tabloid Guaiacum Resin—which we fear will prove rather insoluble—Tabloid Rhatany and Cocaine, and Tabloids of Sulphate of Sodium (effervescent), and of some of the Mineral Waters. The last should prove very convenient for carrying about in comparison with the bulky waters which they represent.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, have been duly registered as legally qualified medical practitioners in their respective colonies:—

NEW SOUTH WALES.

Monti, Silvio, M.D. of Ch.D. Univ. Modena 1890.
 Royle, John Frederick Sharpe, M.B., Mast. Surg. Univ. Aberd. 1881.

For Additional Registration.

Munro, William John, M.D. Univ. Edin. 1896.

NEW ZEALAND.

Guinness, Wyndham Malan Gratian, M.D., B.Ch., B.A.O. Univ. Dubl.

QUEENSLAND.

White, George Vincent, Thursday Island, M.B. 1896, B.S. 1898. Univ. Melb.

VICTORIA.

Scott, Eric Norham, L.R.C.P. of R.C.S. Edin., of L.F.P.S. Glas. 1896.

BIRTHS, MARRIAGE, AND DEATHS.

BIRTHS.

ABBOTT.—On the 8th November, at Kylesmore, 202 Stanmore-road, Petersham, Sydney, the wife of G. H. Abbott, B.A., M.B., Ch.M., of a son.

LAWES.—On the 9th December, at her residence, Linsley-street Cobar, the wife of O. H. E. Lawes, M.B., Ch.M., of a son.

ROWLANDS.—On the 28th November, 1899, at Narramine, N.S.W., the wife of Dr. G. Hamilton Rowlands, of a daughter.

MARRIAGE.

KNAGGS—VOLOKMAN.—At the Congregational Church, Pitt-street, Sydney, on November 24th, 1899, by the Rev. E. T. Dunstan, Samuel T. Knaggs, M.D., &c., to Amy Elfreda, eldest daughter of the late John Voloekman, of Stoke-Newington, London.

DEATHS.

NELLD.—On the 11th November, at the Rectory, Cobbitty, N.S.W., Maria Greenwood, widow of the late J. O. Neld, M.D., aged 87 years.

TENNANT.—December 7th, at Dubbo, N.S.W., Edward Glover Tennant, M.R.C.S., England, aged 44 years.

The Editor invites members of the Profession to forward to him terse notices of Medical Resignations, Vacancies and Appointments, Removals and other items of professional interest.

LIST OF MEMBERS OF THE NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

PUBLISHED IN ACCORDANCE WITH THE ARTICLES OF ASSOCIATION.

* Members of the Council for 1899. † Auditors.

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 Alcorn, R. G., West Maitland
 Alcorn, S. A., East Maitland
 Allan, R. J., Balmain
 Allan, George, Summerhill
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 Armstrong, Geo., College-street, Sydney
 Armstrong, W. G., Roslyn Gardens, Sydney
 Arthur, Richard, Mosman
 Asher, Morris, Lithgow
 Ashwell, Frederick, Glebe
 Barkas, W. J., Paddington
 Barrington, Fourness, Macquarie-street, Sydney
 Bassett, W. Prichard, Bathurst
 Bean, H. K., Wallsend
 Beattie, J. A., Liverpool
 Beeston, J. L., Newcastle
 Beith, Robt., Kiama
 Belli, R., Walgett
 Bennetts, H. G., Temora
 Bennett, F. A., Morpeth
 Bennet, F. A., College-street, Sydney
 Berne, Dagmar, Moore Court, Springwood
 Binney, E. H., Elizabeth-street, Sydney
 Birch, C. O., Liverpool
 Blackall, Patk., Queanbeyan
 Blackwood, F. M., Summer Hill
 Blackland, E. G., Burwood
 Boasman, W. H., Parkes
 Boelke, Grace Fairley, Port Macquarie
 Bott, Joseph, Balmain
 Bowker, R. Steer, jun., Macquarie-street, Sydney
 Bowman, Reginald, Parramatta
 Bowman, Alister Stuart, Singleton
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 Burkitt, W. A. Handcock, Goulburn
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 Caspersenn, E., West Wyalong
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 * Chisholm, W., Macquarie-street, Sydney
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 * Clubbe, Charles Percy Barlee, 195 Macquarie-street, Sydney
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 Collins, P. J., Woollahra
 Colpe, J.
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 Connor, F. G., Lismore
 Cooley, A. G. (travelling)
 Cooley, P. C., Redfern

Corlette, C. E., England
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 Cox, F. H., West Wallsend
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 Lawson, G. L. L., North Sydney
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 O'Neill, W. H., Turramurra
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Park, A. J., Narrabri

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Pym, C. B., Marrickville

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Quaife, W. F., Strathfield

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Read, Clarence, Chatswood

Reading, Richard Fairfax, 151 Macquarie-st., Sydney

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Reid, C. W., Hospital for Insane, Parramatta

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Robertson, W., Stanmore

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Ross, C., Goulburn

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Both, R. E., Darlinghurst-road, Sydney

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Russell, W. J., West Maitland

Rygate, C. D. H., Wellington

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Scott, H. J. H., Scone

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Shewen, Alfred, Liverpool-street, Sydney

Shortt, W., Corowa

Simpson, F. W., Hill End

Sinclair, Eric, Gladsville

Smith, G. H. Walton, Oxford-street, Paddington

Smith, W. G. C., Ryde

Soulé, Milan, Occidental Hotel, San Francisco

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Spark, E. J. S., Stockton

Spencer, Walter, Edgeware-road, Enmore

Sproule, W., Normanton, Q.

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Stoker, H., Wagga Wagga

Stokes, Edward S., Crookwell

Stuart, Thomas Peter Anderson, Professor, University, Sydney

Studdy, W. B., Riverstone

Sturt, Clifton, Bulli

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Tomlinson, W. R., Moree

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Treloar, R. H., Wickham

Tresidder, Stanley, Young

Trindall, Richard B., Newtown

Turkington, H., Merriwa

Vallack, A. Styles, Bowral

Vause, Arthur John, Tempe, Cook's River.

Veech, M., Molong

Wade, T. F., Wollongong

Wade, R. B., Stanmore

Walker-Smith, J., Glebe

Walsh, A. E., Marrickville

Walley, T. B., Tamworth

Walter, Hy., Fremantle, W.A.

Warren, C. F., Wagga Wagga

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Warren, William Edward, Elizabeth-street, Sydney

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Wilson, J. H., Warren

Wilson, J. T., Professor, Sydney University

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Woods, William Cleaver, Albury

Woodforde, A. E., Uralla

Woodward, E. A., Blayney

*Worrall, Ralph, College-street, Sydney

Wright, Horatio George Anthony, Wynyard-sq., Sydney

Young, R. W., Milton

Young, H. C. Taylor, Macquarie-street, Sydney

Zlotkowski, F., Mungundi, N.S.W.

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